Body Builders Layout Book

SUPER DUTY

WHAT'S NEW

- Updated SEIC, BCP Schematics
- Added Vehicle Integration System 2.0 Pinouts
- Model Lineup/ Weight Changes
- Updated PDB And Fuse Locations
- Updated Pro-Power Onboard Guidance
- F-450/F-550 Tire Dimension Updates
- 6.8L 2V (99A) Is Now Flex Fuel Capable On Pickup
- Programmable Engine Idle Shutdown (86K) Optional On XL And XLT
- Updated Exterior Lighting Configuration Guidance

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IMPORTANT NOTICES

The information described herein is believed to be correct at the time of publication, but accuracy cannot be guaranteed. Ford reserves the right to discontinue models or change specifications or designs at any time without notice and without incurring any obligation.

Representations regarding the compliance of any Ford- manufactured incomplete vehicle to any rule, regulation or standard issued pursuant to the National Traffic and Motor Vehicle Safety Act or the Canadian Motor Vehicle Safety Act are set forth only in the Incomplete Vehicle Manual (IVM) which accompanies each incomplete vehicle.

Regulations such as those issued by the Federal Highway Administration (FHA) or issued pursuant to the Occupational Safety and Health Act (OSHA), and/or state, provincial, and local laws and regulations may require installation of additional equipment for the particular use intended for the vehicle. It is the responsibility of the subsequent stage manufacturer or completed vehicle alterer and the vehicle purchaser to ascertain how the vehicle will ultimately be used, if FHA, OSHA or state provincial or local regulations apply and how the vehicle as completed will comply with those requirements. Nothing contained herein is to be construed as a representation that such equipment required for the particular use intended has been installed on the completed or incomplete vehicle.

REFERENCE INFORMATION

Ford Body Builder Advisory Service Publications

This document is an example of a program-specific Body Builders Layout Book (BBLB) published by the Ford Body Builder Advisory Service (BBAS) team. Each Ford Commercial Truck vehicle line has a similar document that aims to provide detailed information which may be of interest to a subsequent-stage manufacturer or alterer.

The Ford Transit and Transit Connect also have a Body and Equipment Mounting Manual (BEMM), which is a comprehensive resource dedicated to body and equipment mounting information.

Yet another source of program-specific information are the “Vehicle Specification” documents available on the Ford BBAS website. Information typically found in these documents are vehicle curb and accessory weights, vehicle dimensions, component descriptions, capacities, GAWRs, alternator output, powertrain output and gear ratios.

In addition to the program-specific documents, there are several Ford BBLB documents that contain general best practices or information on specific subjects that span multiple vehicle lines. These include:

- General BBLB - contains Definitions, Design Recommendations and Vehicle Storage Guidelines.
- Snowplow BBLB
- Pickup Box Removal BBLB

These publications are updated every model year and can be accessed via the web at https://fordbbas.com under “Publications”. For BBLB and BEMM documents, expand the “Body Builder Layout Book” Section to view all available documents. For Vehicle Specifications, expand the “Vehicle Specifications” section. The website search function can be used to filter for specific content or vehicle line.

Ford Body Builder Advisory Service Bulletins

Occasionally, the Ford BBAS team will create an SVE “Bulletin” to address a specific issue or distribute important information in a timely manner. These documents can be accessed via the web at https://www.fordpro.com/en-us/upfit/publications/ under “Bulletins”. The website search function can be used to filter for specific content or vehicle line.

If applicable, information from each SVE bulletin will be incorporated into the appropriate BBLB document the following model year. In some cases, SVE bulletins will continue to be referenced in this document.

Ford Body Builder Advisory Service Contact

The Ford Truck Body Builder Advisory Service may be consulted if questions regarding the completion of Ford commercial vehicles are not adequately addressed in the documentation described above. For assistance call (877) 840-4338 or e-mail via the web at https://www.fordpro.com/en-us/upfit/contact-us/

For Ford vehicle CAD requests, please visit https://www.fordpro.com/en-us/upfit/cad/.

For both Questions and CAD Requests, please be as specific as possible with the request details to assure the most accurate and timely response.

Ford Service Publications

Ford Service Technical Resources (including wiring diagrams, repair manuals and diagnostic tool support) are available by subscription via the Motorcraft website: www.motorcraftservice.com

The following publications are examples of digital and printed manuals which are available from Helm Incorporated; call 1-800-782-4356 or contact Helm, Inc. at their website www.helminc.com:

- Ford Truck Shop Manuals
- Ford Towing Manuals
- Ford Wiring Diagrams

Body Builders Layout Book

SUPER DUTY

PICKUP / PICKUP BOX DELETE[4] MODEL LINEUP - F-250 SRW (10K GVWR)

	ENGINE	DRIVE	CAB	WB (in)	GVWR (lb.)	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-250 PICKUP	6.7L	4x2	REG	141.5	10,000	3506	3946	2509	6455	4400	4850	6340	6340	1574	23500
			SUPER												
				164.1	10,000	3088	4157	2714	6871	4850	5300	6340	6340	2017	23500
			CREW	159.7	10,000	3123	4121	2714	6835	4700	5300	6340	6340	2053	23500
				175.9	10,000	2875	4254	2828	7082	5000	5300	6340	6340	1806	23500
		4x4	REG	141.5	10,000	3090	4271	2597	6868	4800	5990	6340	6340	1161	23500
			SUPER	147.9	10,000	2816	4363	2778	7140	5200	5990	6340	6340	1748	23500
				164.1	10,000	2698	4493	2765	7258	5200	5990	6340	6340	1630	23500
			CREW	159.7	10,000	2753	4429	2774	7203	5200	5990	6340	6340	1685	23500
				175.9	10000	2437	4643	2875	7517	5600	5990	6340	6340	1371	23500
	6.8L	4x2	REG	141.5	10000	4268	3273	2424	5697	3800	4250	6340	6340	2402	23500
			SUPER	147.9	10000	3969	3410	2585	5995	3950	4400	6340	6340	2104	23500
				164.1	10000	3859	3510	2594	6104	4250	4700	6340	6340	1995	23500
			CREW	159.7	10,000	3922	3449	2592	6041	3950	4550	6340	6340	2058	23500
				175.9	10,000	3698	3539	2725	6264	4250	4700	6340	6340	1835	23500
		4x4	REG	141.5	10,000	3814	3631	2517	6148	4400	5990	6340	6340	1951	23500
			SUPER	147.9	10,000	3546	3757	2658	6415	4400	5990	6340	6340	1684	23500
				164.1	10,000	3457	3866	2637	6504	4800	5990	6340	6340	1595	23500
			CREW	159.7	10,000	3565	3786	2610	6396	4400	5990	6340	6340	1703	23500
				175.9	10,000	3260	3981	2718	6699	4800	5990	6340	6340	1400	23500
	7.3L	4x2	REG	141.5	10,000	4164	3339	2461	5801	3950	4400	6340	6340	2298	26000
			SUPER	147.9	10000	3885	3466	2613	6078	3950	4550	6340	6340	2021	26000
			CREW	159.7	10,000	3838	3505	2620	6124	4100	4700	6340	6340	1975	26000
				175.9	10,000	3614	3595	2753	6348	4250	4850	6340	6340	1751	26000
		4x4	REG	141.5	10,000	3730	3687	2545	6232	4400	5990	6340	6340	1867	26000
			SUPER	147.9	10,000	3462	3813	2685	6499	4400	5990	6340	6340	1600	26000
				164.1	10,000	3373	3923	2665	6587	4800	5990	6340	6340	1512	26000
			CREW	159.7	10,000	3481	3842	2638	6480	4400	5990	6340	6340	1619	26000
				175.9	10,000	3176	4037	2746	6783	4800	5990	6340	6340	1316	26000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).
4) Pickup box delete is available with Regular Cab 141.5" WB, SuperCab 164.1" WB and Crew Cab 175.9" WB models with 6.8L or 6.7L engines only. Base Curb Weights shown are for completed pickup truck models with standard equipment. To adjust the Base Curb Weight to reflect Pickup Box Delete, add 20 lb. to "Front" weight, subtract 378 lb. from "Rear" weight and subtract 358 lb. from "Total" weight. ARC weights are not applicable to Pickup Box Delete, see the Super Duty Incomplete Vehicle Manual for Unloaded Vehicle Weight restrictions.

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP / PICKUP BOX DELETE[4] MODEL LINEUP - F-250 SRW (9,900 GVWR)

	GVWR (lb.)	CAB	WB (in)	DRIVE	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-250 PICKUP	9900	REG	141.5	4x2	6.8L	4168	3273	2424	5697	3800	4250	6340	6340	2402	23500
					7.3L	4064	3339	2461	5801	3800	4400	6340	6340	2298	26000
					6.7L	3406	3946	2509	6455	4400	4850	6340	6340	1574	23500
				4x4	6.8L	3714	3631	2517	6148	4400	5990	6340	6340	1951	23500
					7.3L	3630	3687	2545	6232	4400	5990	6340	6340	1867	26000
					6.7L	2990	4271	2597	6868	4800	5990	6340	6340	1161	23500
		SUPER	147.9	4x2	6.8L	3869	3410	2585	5995	3950	4400	6340	6340	2104	23500
					7.3L	3785	3466	2613	6078	3950	4550	6340	6340	2021	26000
				4x4	6.8L	3446	3757	2658	6415	4400	5990	6340	6340	1684	23500
					7.3L	3362	3813	2685	6499	4400	5990	6340	6340	1600	26000
					6.7L	2716	4363	2778	7140	5200	5990	6340	6340	1748	23500
			164.1	4x2	6.8L	3759	3510	2594	6104	4250	4700	6340	6340	1995	23500
					6.7L	2988	4157	2714	6871	4850	5300	6340	6340	2017	23500
				4x4	6.8L	3357	3866	2637	6504	4800	5990	6340	6340	1595	23500
					7.3L	3273	3923	2665	6587	4800	5990	6340	6340	1512	26000
					6.7L	2598	4493	2765	7258	5200	5990	6340	6340	1630	23500
		CREW	159.7	4x2	6.8L	3822	3449	2592	6041	3950	4550	6340	6340	2058	23500
					7.3L	3738	3505	2620	6124	4100	4700	6340	6340	1975	26000
					6.7L	3023	4121	2714	6835	4700	5300	6340	6340	2053	23500
				4x4	6.8L	3465	3786	2610	6396	4400	5990	6340	6340	1703	23500
					7.3L	3381	3842	2638	6480	4400	5990	6340	6340	1619	26000
					6.7L	2653	4429	2774	7203	5200	5990	6340	6340	1685	23500
			175.9	4x2	6.8L	3598	3539	2725	6264	4250	4700	6340	6340	1835	23500
					7.3L	3514	3595	2753	6348	4250	4850	6340	6340	1751	26000
					6.7L	2775	4254	2828	7082	5000	5300	6340	6340	1806	23500
				4x4	6.8L	3160	3981	2718	6699	4800	5990	6340	6340	1400	23500
					7.3L	3076	4037	2746	6783	4800	5990	6340	6340	1316	26000
					6.7L	2337	4643	2875	7517	5600	5990	6340	6340	1371	23500

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).
4) Pickup box delete is available with Regular Cab 141.5" WB, SuperCab 164.1" WB and Crew Cab 175.9" WB models with 6.8L or 6.7L engines only. Base Curb Weights shown are for completed pickup truck models with standard equipment. To adjust the Base Curb Weight to reflect Pickup Box Delete, add 20 lb. to "Front" weight, subtract 378 lb. from "Rear" weight and subtract 358 lb. from "Total" weight. ARC weights are not applicable to Pickup Box Delete, see the Super Duty Incomplete Vehicle Manual for Unloaded Vehicle Weight restrictions.

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

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SUPER DUTY

PICKUP MODEL LINEUP - F-250 SRW (>10K GVWR PKG)

	ENGINE	DRIVE	CAB	WB (in)	GVWR (lb.)	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-250 PICKUP	6.7L	4X2	REG	141.5	10,600	4048	3946	2509	6455	4550	4850	6340	6340	1574	23500
			SUPER												
				164.1	10,600	3626	4157	2714	6871	4850	5300	6340	6340	2017	23500
			CREW	159.7	10,600	3662	4121	2714	6835	4700	5300	6340	6340	2053	23500
				175.9	10,600	3411	4254	2828	7082	5000	5300	6340	6340	1806	23500
		4X4	REG	141.5	10,600	3628	4271	2597	6868	4800	5990	6340	6340	1161	23500
			SUPER	147.9	10,600	3352	4363	2778	7140	5200	5990	6340	6340	1748	23500
				164.1	10,600	3233	4493	2765	7258	5200	5990	6340	6340	1630	23500
			CREW	159.7	10,600	3288	4429	2774	7203	5200	5990	6340	6340	1685	23500
				175.9	10,600	2970	4643	2875	7517	5600	5990	6340	6340	1371	23500
	6.8L	4X2	SUPER	147.9	10,100	4015	3410	2585	5995	3950	4400	6340	6340	2104	23500
				164.1	10,400	4204	3510	2594	6104	4250	4700	6340	6340	1995	23500
			CREW	159.7	10,100	3968	3449	2592	6041	3950	4550	6340	6340	2058	23500
				175.9	10,400	4041	3539	2725	6264	4250	4700	6340	6340	1835	23500
		4X4	REG	141.5	10,300	4059	3631	2517	6148	4400	5990	6340	6340	1951	23500
			SUPER	147.9	10,400	3888	3757	2658	6415	4400	5990	6340	6340	1684	23500
				164.1	10,600	3998	3866	2637	6504	4800	5990	6340	6340	1595	23500
			CREW	159.7	10,500	4007	3786	2610	6396	4400	5990	6340	6340	1703	23500
				175.9	10,600	3800	3981	2718	6699	4800	5990	6340	6340	1400	23500
	7.3L	4X2	SUPER	147.9	10,100	3930	3466	2613	6078	3950	4550	6340	6340	2021	26000
			CREW	159.7	10,200	3983	3505	2620	6124	4100	4700	6340	6340	1975	26000
				175.9	10,500	4057	3595	2753	6348	4400	4850	6340	6340	1751	26000
		4X4	REG	141.5	10,400	4074	3687	2545	6232	4400	5990	6340	6340	1867	26000
			SUPER	147.9	10,400	3803	3813	2685	6499	4400	5990	6340	6340	1600	26000
				164.1	10,600	3914	3923	2665	6587	4800	5990	6340	6340	1512	26000
			CREW	159.7	10,500	3923	3842	2638	6480	4400	5990	6340	6340	1619	26000
				175.9	10,600	3715	4037	2746	6783	4800	5990	6340	6340	1316	26000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP MODEL LINEUP - F-250 SRW GVWR UPGRADE & TRAILER TOW PKG

	ENGINE	DRIVE	CAB	WB (in)	GVWR (lb.)	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-250 PICKUP	6.7L	4X2	REG	141.5	10600	3918	3946	2637	6583	4550	4850	6340	6340	1446	30000
			SUPER												
				164.1	11000	3896	4157	2842	6999	4850	5300	6340	6340	1889	30000
			CREW	159.7	10800	3732	4121	2842	6963	4700	5300	6340	6340	1925	30000
				175.9	11100	3781	4254	2956	7210	5000	5300	6340	6340	1678	30000
	6.7L HO		REG	141.5	10600	3903	3961	2637	6598	4550	5000	6340	6340	1431	31000
			SUPER												
				164.1	11000	3881	4172	2842	7014	4850	5300	6340	6340	1874	31000
			CREW	159.7	10800	3717	4136	2842	6978	4700	5300	6340	6340	1910	31000
				175.9	11100	3766	4269	2956	7225	5000	5300	6340	6340	1663	31000
	6.7L	4X4	REG	141.5	11000	3899	4271	2725	6996	4800	5990	6340	6340	1033	30000
			SUPER	147.9	11000	3622	4363	2906	7268	5200	5990	6340	6340	1620	30000
				164.1	11200	3703	4493	2893	7386	5200	5990	6340	6340	1502	30000
			CREW	159.7	11100	3658	4429	2902	7331	5200	5990	6340	6340	1557	30000
				175.9	11200	3440	4643	3003	7645	5600	5990	6340	6340	1243	30000
	6.7L HO		REG	141.5	11000	3883	4286	2725	7011	4800	5990	6340	6340	1018	31000
			SUPER	147.9	11000	3607	4378	2906	7283	5200	5990	6340	6340	1605	31000
				164.1	11400	3888	4508	2893	7401	5200	5990	6340	6340	1487	31000
			CREW	159.7	11100	3643	4444	2902	7346	5200	5990	6340	6340	1542	31000
				175.9	11400	3625	4658	3003	7660	5600	5990	6340	6340	1228	31000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP MODEL LINEUP - F-350 SRW W/ 17'' TIRES

	CAB	WB (in)	DRIVE	ENGINE	GVWR (lb.)	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-350 PICKUP	REG	141.5	4x2	6.7L	10600	3948	3889	2664	6553	4400	4850	6340	6340	750	31000
			4x4	6.8L	10400	4087	3664	2555	6220	4400	5990	6340	6340	861	24400
				7.3L	10400	3870	3729	2704	6433	4400	5990	6340	6340	957	29000
				6.7L	11000	3923	4291	2681	6972	4800	5990	6340	6340	904	31000
	SUPER	147.9	4x2	6.8L	10100	3973	3413	2623	6036	3950	4400	6340	6340	635	24400
				7.3L	10100	3756	3478	2772	6250	3950	4550	6340	6340	702	29000
				6.7L	10700	3826	4004	2767	6772	4550	5300	6340	6340	649	31000
			4x4	6.8L	10500	3939	3778	2686	6463	4400	5990	6340	6340	667	24400
				7.3L	10500	3723	3842	2834	6677	4400	5990	6340	6340	916	29000
				6.7L	11000	3702	4339	2851	7190	5200	5990	6340	6340	863	31000
		164.1	4x2	6.8L	10400	4160	3515	2633	6148	4250	4700	6340	6340	830	24400
				6.7L	11000	3999	4125	2772	6897	4850	5300	6340	6340	837	31000
			4x4	6.8L	10800	4130	3896	2675	6571	4800	5990	6340	6340	862	24400
				7.3L	10800	3914	3960	2824	6784	4800	5990	6340	6340	1105	29000
				6.7L	11300	3874	4487	2828	7315	5200	5990	6340	6340	1051	31000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP MODEL LINEUP - F-350 SRW W/ 17'' TIRES (CONT)

	CAB	WB (in)	DRIVE	ENGINE	GVWR (lb.)	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-350 PICKUP	CREW	159.7	4x2	6.8L	10200	3915	3482	2710	6191	4100	4550	6340	6340	635	24400
				7.3L	10200	3699	3547	2858	6405	4100	4700	6340	6340	829	29000
				6.7L	10800	3748	4087	2860	6947	4700	5300	6340	6340	775	31000
			4x4	6.8L	10600	3893	3870	2738	6608	4400	5990	6340	6340	667	24400
				7.3L	10600	3676	3934	2886	6821	4800	5990	6340	6340	1013	29000
				6.7L	11200	3717	4470	2901	7372	5200	5990	6340	6340	960	31000
		175.9	4x2	6.8L	10600	4086	3664	2753	6417	4400	4850	6340	6340	830	24400
				7.3L	10600	3870	3729	2902	6630	4400	5000	6340	6340	1024	29000
				6.7L	11100	3808	4243	2940	7184	5000	5300	6340	6340	970	31000
			4x4	6.8L	10900	4076	4050	2672	6722	4800	5990	6340	6340	862	24400
				7.3L	10900	3860	4115	2821	6936	4800	5990	6340	6340	1201	29000
				6.7L	11499	3735	4676	2972	7649	5600	5990	6340	6340	1147	31000
	REG	141.5	4X2	6.7L HO	10600	3933	3904	2664	6568	4400	4850	6340	6340	750	35200
	SUPER														
		164.1			11000	3983	4141	2772	6913	4850	5300	6340	6340	805	35200
	CREW	159.7			10800	3733	4103	2860	6962	4700	5300	6340	6340	775	35200
		175.9			11100	3793	4259	2940	7199	5000	5300	6340	6340	938	35200
	REG	141.5	4X4		11000	3907	4306	2681	6987	4800	5990	6340	6340	904	35200
	SUPER	147.9			11000	3686	4355	2851	7205	5200	5990	6340	6340	863	35200
		164.1			11300	3859	4503	2828	7331	5200	5990	6340	6340	1019	35200
	CREW	159.7			11200	3702	4486	2901	7387	5200	5990	6340	6340	949	35200
		175.9			11499	3719	4692	2972	7664	5600	5990	6340	6340	1115	35200

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP MODEL LINEUP - F-350 SRW W/ 18'' ALL-SEASON TIRES

	DRIVE	CAB	WB (in)	ENGINE	GVWR (lb.)	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-350 PICKUP	4X2	REG	141.5	6.8L	10500	4557	3322	2532	5854	3950	4400	6780	6780	831	24400
				7.3L	10500	4341	3387	2681	6068	3950	4400	6780	6780	804	29000
				6.7L	11100	4390	3967	2643	6610	4550	5000	6780	6780	750	31000
		SUPER	147.9	6.8L	10600	4411	3437	2660	6097	3950	4550	6780	6780	635	24400
				7.3L	10600	4194	3501	2809	6310	4100	4550	6780	6780	702	29000
				6.7L	11200	4268	4035	2793	6829	4550	5300	6780	6780	649	31000
			164.1	6.8L	10900	4602	3560	2645	6205	4250	4850	6780	6780	830	24400
				6.7L	11499	4439	4129	2826	6955	4850	5300	6780	6780	837	31000
		CREW	159.7	6.8L	10600	4257	3503	2746	6248	4100	4550	6780	6780	635	24400
				7.3L	10700	4141	3568	2894	6462	4100	4700	6780	6780	829	29000
				6.7L	11300	4190	4113	2891	7004	4700	5300	6780	6780	775	31000
			175.9	6.8L	11100	4528	3699	2775	6474	4400	4850	6780	6780	830	24400
				7.3L	11100	4312	3764	2924	6687	4550	5300	6780	6780	1024	29000
				6.7L	11499	4149	4292	2948	7241	5000	5300	6780	6780	970	31000
	4x2	REG	141.0	HO 6.7L	11100	4375	3982	2643	6625	4550	5000	6780	6780	750	35200
		SUPER	147.9		12,000	4,732	4,385	2,883	7,267	5,200	5,950	7,230	7,230	1,116	35,200
			164.1		11499	4423	4145	2826	6971	4850	5300	6780	6780	805	35200
		CREW	159.7		11300	4175	4129	2891	7019	4700	5300	6780	6780	775	35200
			175.9		11499	4134	4308	2948	7256	5000	5300	6780	6780	938	35200

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP MODEL LINEUP - F-350 SRW W/ 18'' ALL-SEASON TIRES (CONT)

	DRIVE	CAB	WB (in)	ENGINE	GVWR (lb.)	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-350 PICKUP	4X4	REG	141.5	6.8L	10900	4529	3741	2535	6277	4400	5950	6780	6780	861	24400
				7.3L	10900	4312	3806	2684	6490	4400	5950	6780	6780	957	29000
				6.7L	11499	4364	4351	2678	7029	5200	5950	6780	6780	904	31000
		SUPER	147.9	6.8L	10900	4281	3808	2713	6520	4400	5950	6780	6780	667	24400
				7.3L	11000	4165	3872	2861	6734	4400	5950	6780	6780	916	29000
				6.7L	11499	4142	4399	2849	7248	5200	5950	6780	6780	863	31000
			164.1	6.8L	11300	4572	3917	2711	6628	4800	5950	6780	6780	862	24400
				7.3L	11300	4356	3981	2860	6841	4800	5950	6780	6780	1105	29000
				6.7L	11499	4016	4522	2850	7372	5200	5950	6780	6780	1051	31000
		CREW	159.7	6.8L	11000	4235	3888	2777	6665	4400	5950	6780	6780	667	24400
				7.3L	11100	4119	3952	2925	6878	4800	5950	6780	6780	1013	29000
				6.7L	11499	3958	4506	2922	7429	5200	5950	6780	6780	960	31000
			175.9	6.8L	11300	4418	4084	2696	6780	4800	5950	6780	6780	862	24400
				7.3L	11300	4201	4149	2845	6994	5200	5950	6780	6780	1201	29000
				6.7L	12000	4150	4673	3060	7734	5600	5950	6780	6780	1147	31000
	4x4	REG	141.5	HO 6.7L	11499	4348	4366	2678	7044	5200	5950	6780	6780	904	35200
		SUPER	147.9		11499	4126	4415	2849	7263	5200	5950	6780	6780	863	35200
			164.1		11499	4000	4538	2850	7388	5600	5950	6780	6780	1019	35200
		CREW	159.7		11499	3943	4522	2922	7444	5200	5950	6780	6780	949	35200
			175.9		12000	4134	4689	3060	7749	5600	5950	6780	6780	1115	35200

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP MODEL LINEUP - F-350 SRW W/18" (20" DIESEL) ALL-TERRAIN TIRES

	DRIVE	CAB	WB (in)	ENGINE	GVWR (lb.)	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-350 PICKUP	4X4	REG	141.5	6.8L	11400	5024	3709	2572	6282	4400	5950	7230	7230	861	24400
				7.3L	11400	4807	3774	2721	6495	4400	5950	7230	7230	957	29000
				6.7L	12000	4860	4336	2698	7034	5200	5950	7230	7230	904	31000
		SUPER	147.9	6.8L	11400	4776	3811	2715	6525	4400	5950	7230	7230	667	24400
				7.3L	11400	4560	3875	2863	6739	4400	5950	7230	7230	916	29000
				6.7L	12000	4639	4369	2883	7252	5200	5950	7230	7230	863	31000
			164.1	6.8L	11800	5067	3923	2710	6633	4800	5950	7230	7230	862	24400
				7.3L	11800	4851	3987	2859	6846	4800	5950	7230	7230	1105	29000
				6.7L	12300	4811	4489	2888	7377	5200	5950	7230	7230	1051	31000
		CREW	159.7	6.8L	11499	4729	3888	2782	6670	4400	5950	7230	7230	667	24400
				7.3L	11499	4512	3952	2930	6883	4800	5950	7230	7230	1013	29000
				6.7L	12000	4454	4471	2962	7434	5200	5950	7230	7230	960	31000
			175.9	6.8L	11900	5012	4054	2731	6785	4800	5950	7230	7230	862	24400
				7.3L	11900	4796	4119	2880	6999	5200	5950	7230	7230	1201	29000
				6.7L	12400	4587	4652	3044	7697	5600	5950	7230	7230	1147	31000
	4x4	REG	141.0	HO 6.7L	12000	4844	4351	2698	7049	5200	5950	7230	7230	904	35200
		SUPER	147.9		12000	4623	4385	2883	7267	5200	5950	7230	7230	863	35200
			164.1		12300	4796	4505	2888	7393	5600	5950	7230	7230	1019	35200
		CREW	159.7		12000	4439	4487	2962	7449	5200	5950	7230	7230	949	35200
			175.9		12400	4572	4668	3044	7712	5600	5950	7230	7230	1115	35200

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP MODEL LINEUP - F-350 DRW

	GVWR (lb.)	CAB	WB (in)	DRIVE	ENGINE	MAX ADVERTISED PAYLOAD(1) (lb.)	BASE CURB WEIGHT (lb.)			GAWR(3) (lb.)				MAX TOTAL ARC(2) (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-350 PICKUP DRW	14,000	REG	141.5	4x2	6.8L	7756	3341	2865	6206	4100	4400	10300	10300	733	25400
					7.3L	7647	3424	2890	6314	4100	4550	10300	10300	779	29500
					6.7L	6965	3969	3023	6992	4700	5000	9900	9900	778	43900
				4x4	6.8L	7313	3687	2960	6647	4400	5990	9900	9900	770	25400
					7.3L	7216	3746	2997	6743	4400	5990	9900	9900	817	29500
					6.7L	6534	4315	3106	7421	5200	5990	9900	9900	815	43900
		SUPER	164.1	4x2											
					6.7L	6519	4251	3185	7436	5300	5300	9900	9900	818	43900
				4x4	6.8L	6877	3912	3169	7080	4800	5990	9900	9900	771	25400
					7.3L	6780	3970	3206	7176	4800	5990	9900	9900	858	29500
					6.7L	6100	4552	3300	7852	5600	5990	9900	9900	857	43900
		CREW	175.9	4x2											
					6.7L	6332	4305	3317	7622	5300	5300	9900	9900	908	43900
				4x4	6.8L	6649	4063	3244	7306	5200	5990	9900	9900	771	25400
					7.3L	6553	4121	3281	7402	5200	5990	9900	9900	1000	29500
					6.7L	5839	4704	3408	8111	5600	5990	9900	9900	947	43900
		REG	141.0	4X2	6.7L HO	6950	3985	3023	7008	4700	5000	9900	9900	778	45600
		SUPER	164.1			6504	4266	3185	7451	5300	5300	9900	9900	818	45600
		CREW	175.9			6316	4320	3317	7637	5300	5300	9900	9900	915	45600
		REG	141.0	4X4		6519	4330	3106	7436	5200	5990	9900	9900	815	45600
		SUPER	164.0			6085	4568	3300	7868	5600	5990	9900	9900	857	45600
		CREW	175.9			5824	4719	3408	8127	5600	5990	9900	9900	954	45600

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

Body Builders Layout Book

SUPER DUTY

PICKUP MODEL LINEUP - F-450 DRW

	GVWR (lb.)	CAB	WB (in)	DRIVE	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[3] (lb.)				MAX TOTAL ARC[2] (lb.)	MAX GCWR (lb.)
										MIN	MAX	MIN	MAX		
							FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-450 PICKUP / DRW	14,000	REG	141.5	4X2	6.7L	6,296	4,244	3,413	7,657	5,200	5,990	9,900	9,900	697	46,700
			141.5		6.7L HO	6,281	4,260	3,413	7,673	5,200	5,990	9,900	9,900	631	46,700
		CREW	175.9		6.7L	5638	4,568	3,744	8,312	5,600	5,990	9,900	9,900	887	43,500
			175.9		6.7L HO	5622	4,584	3,744	8,327	5,600	5,990	9,900	9,900	822	43,500
		REG	141.0	4X4	6.7L	5898	4,562	3,491	8,053	5,200	5,990	9,900	9,900	853	46,700
			141.0		6.7L HO	5883	4578	3491	8068	5200	5990	9900	9900	787	46700
		CREW	175.9		6.7L	5336	4814	3798	8612	5600	5990	9900	9900	927	43500
			175.9		6.7L HO	5320	4830	3798	8627	5600	5990	9900	9900	920	43500

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Accessory Reserve Capacity (ARC) Weight is the maximum allowable weight for regular production options and aftermarket equipment for completed pickup truck with standard equipment. The official ARC weight for a completed vehicle is provided by Ford on the Certification Label, see the General BBLB "Weight Considerations for Completed Vehicles" section for more information.
3) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

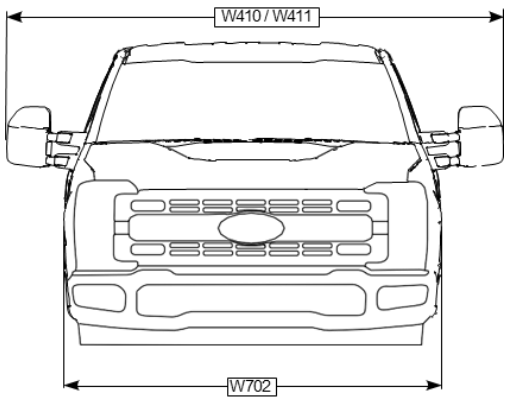
The standard front spring/GAWR on Pickup models is computer-selected based on the total front weight of options ordered. Front spring/GAWR upgrades range from 3800 lb. to 5300 lb. (4x2) and 4400 lb. to 6000 lb. (4x4).

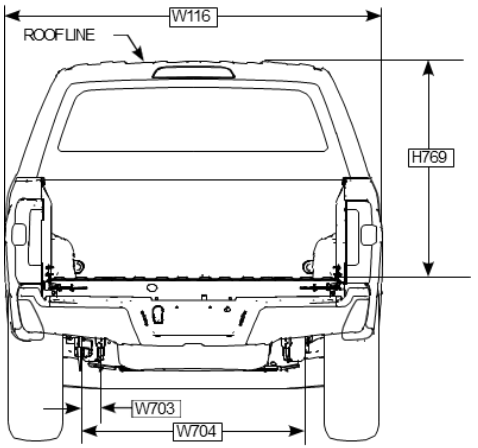
Certain option packages include the following front spring/GAWR upgrades:
- Heavy Service Front Suspension Package and Heavy Service Package — Front springs/GAWR will be selected 1 upgrade higher than standard computer selection;
- Camper Package — Front springs/GAWR will be selected 2 upgrades higher than standard computer selection on 4x2 models and 1 upgrade higher than standard computer selection on 4x4 models;
- Snowplow Package — Front spring/GAWR upgrade is not included if the maximum front spring has been computer-selected as a consequence of options ordered.

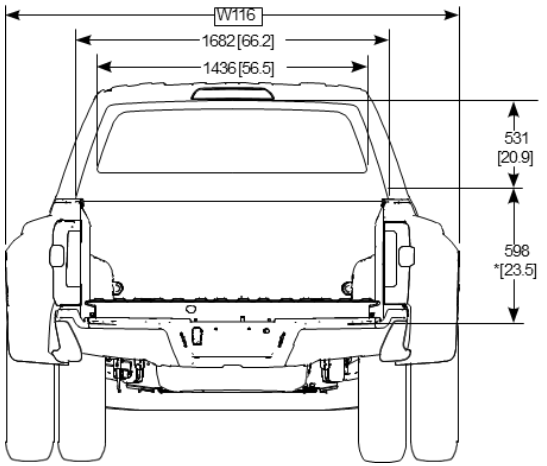
Body Builders Layout Book

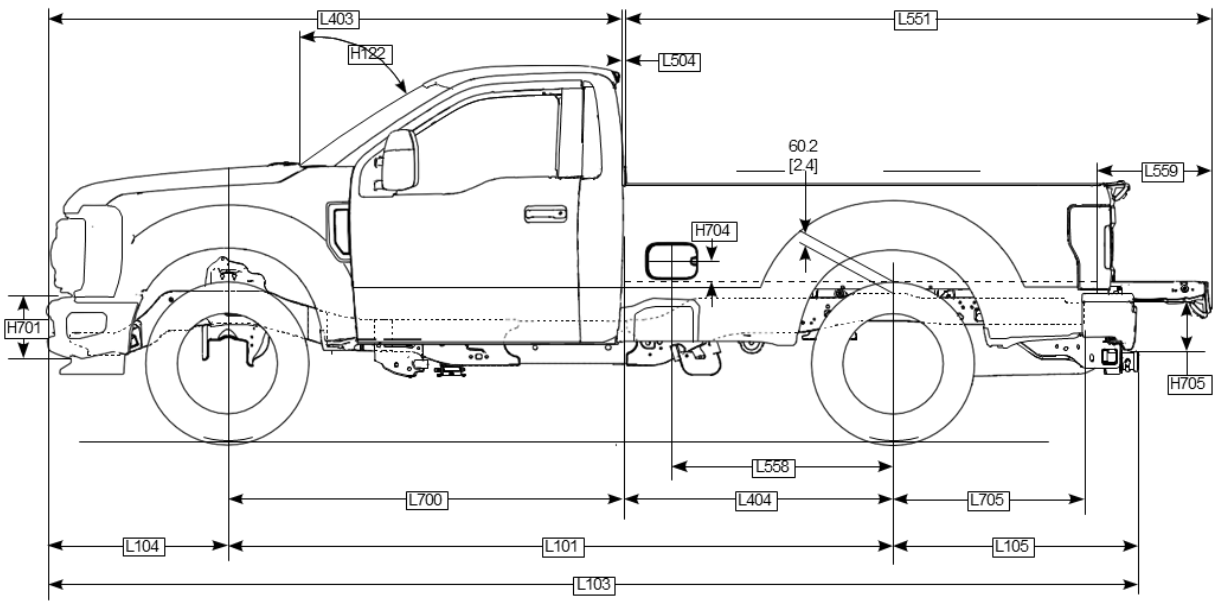
SUPER DUTY

PICKUP DIMENSIONAL DATA - REGULAR CAB









CHASSIS			
CODE	DESCRIPTION	4x2 & 4x4	
L101	WHEELBASE	3596	[141.6]
L103	VEHICLE LENGTH	5888	[231.8]
L104	FRONT OVERHANG	971	[38.2]
L105	REAR OVERHANG	1321	[52.0]
L403	FRONT OF BUMPER TO BACK OF CAB	3142	[123.7]
L404	CAB TO C_L OF REAR AXLE	1425	[56.1]
L700	C_L OF FRONT AXLE TO BACK OF CAB	2171	[85.5]
L705	C_L OF REAR AXLE TO REAR END OF FRAME	1055	[41.5]
W703	FRAME RAIL WIDTH (Nominal at CL of rear axle)	61	[2.4]
W704	REAR FRAME WIDTH (Nominal at CL of rear axle)	958	[37.7]

PICKUP			
CODE	DESCRIPTION	4x2 & 4x4	
	NOMINAL CARGO BODY SIZE – 8 FT		
H704	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO CL OF FUEL FILLER DOOR	113	[4.4]
H705	REAR BUMPER HEIGHT	306	[12.0]
H769	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO TOP OF CAB @ C_L OF REAR AXLE	1168	[46.0]
L504	CAB TO PICKUP BOX	16	[0.6]
L551	BOX OVERALL LENGTH TO OPEN TAILGATE	3205	[126]
L558	C_L OF REAR AXLE TO C_L OF FUEL FILLER DOOR	1193	[47.0]
L559	LENGTH OF OPEN TAILGATE (From end of box floor)	632	[25]

CAB			
CODE	DESCRIPTION	4x2 & 4x4	
H122	WINDSHIELD ANGLE (DEGREES)	53.6	
H701	FRONT BUMPER HEIGHT - W/O VALENCE	370	[14.6]
H701	FRONT BUMPER HEIGHT - W/ VALENCE	414/513	[16.3/20.2]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS)- SRW	2,031	[80.0]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS) - DRW	2,438	[96.0]
W410	VEHICLE WIDTH (CAB WIDTH MAX WITH: MANUAL MIRRORS)	2,689	[105.9]
W410	VEHICLE WIDTH (CAB WIDTH MAX WITH: TRAILER TOW MIRRORS – EXTENDED)	2,817	[110.9]
W411	VEHICLE WIDTH (CAB WIDTH MAX WITH: TRAILER TOW MIRRORS – FOLDED)	2,167	[85.3]
W702	FRONT BUMPER WIDTH	1,982	[78.0]

NOTE- [ ] DIMENSION ARE INCHES

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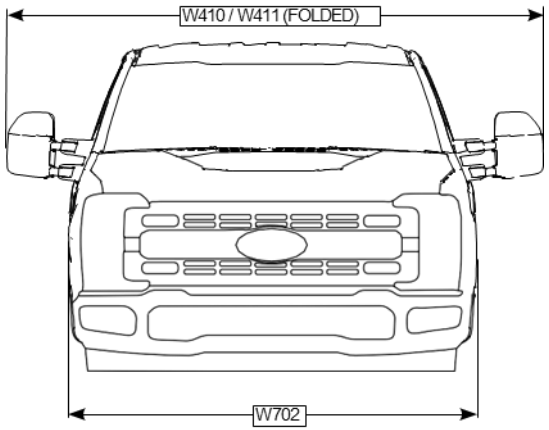
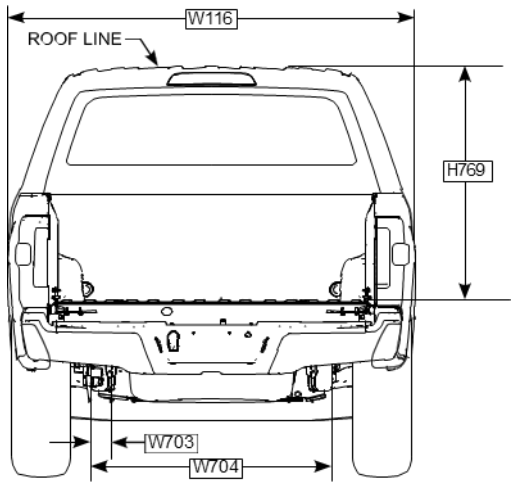
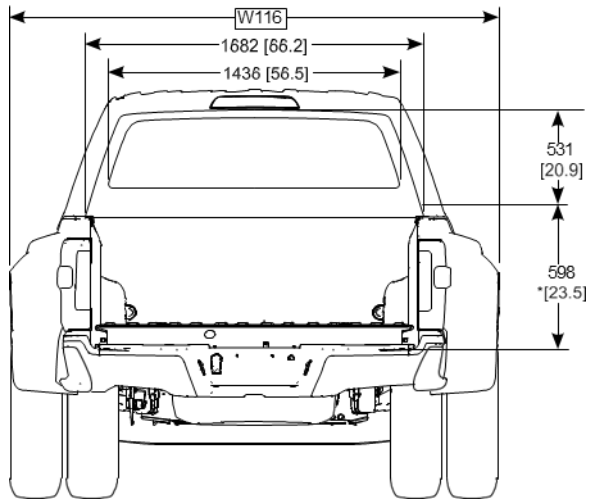
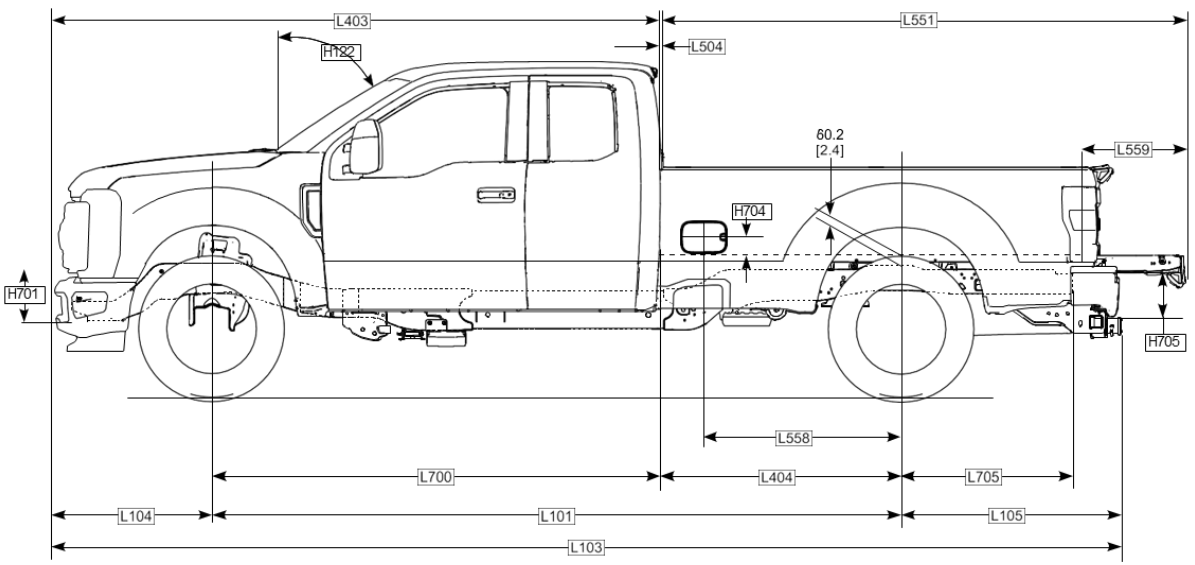
SUPER DUTY

PICKUP DIMENSIONAL DATA - SUPERCAB









CHASSIS			
CODE	DESCRIPTION	SWB	LWB
L101	WHEELBASE	3759 [148.0]	4170 [164.2]
L103	VEHICLE LENGTH	6051 [238.2]	6462 [254.4]
L104	FRONT OVERHANG	971 [38.2]	971 [38.2]
L105	REAR OVERHANG	1321 [52.0]	1321 [52.0]
L403	FRONT OF BUMPER TO BACK OF CAB	3716 [146.3]	3716 [146.3]
L404	CAB TO CL OF REAR AXLE	1014 [39.9]	1425 [56.1]
L700	CL OF FRONT AXLE TO BACKOF CAB	2745 [108.1]	2745 [108.1]
L705	CL OF REAR AXLE TO REAR END OF FRAME	1055 [41.5]	1055 [41.5]
W703	FRAME RAIL WIDTH (Nominal at CL of rear axle)	61 [2.4]	61 [2.4]
W704	REAR FRAME WIDTH (Nominal at CL of rear axle)	958 [37.7]	958 [37.7]

PICKUP			
CODE	DESCRIPTION	SWB	LWB
	NOMINAL CARGO BODY SIZE	**6.75 FT**	**8 FT**
H704	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO CL OF FUEL FILLER DOOR	97 [3.8]	113 [4.4]
H705	REAR BUMPER HEIGHT	306 [12.0]	306 [12.0]
H769	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO TOP OF CAB @ CL OF REAR AXLE	1173 [46.2]	1173 [46.2]
L504	CAB TO PICKUP BOX	16 [0.6]	16 [0.6]
L551	BOX OVERALL LENGTH TO OPEN TAILGATE	2744 [108]	3155 [124]
L558	CL OF REAR AXLE TO CL OF FUEL FILLER DOOR	782 [30.8]	1193 [47.0]
L559	LENGTH OF OPEN TAILGATE (From end of box floor)	629 [24.8]	629 [24.8]

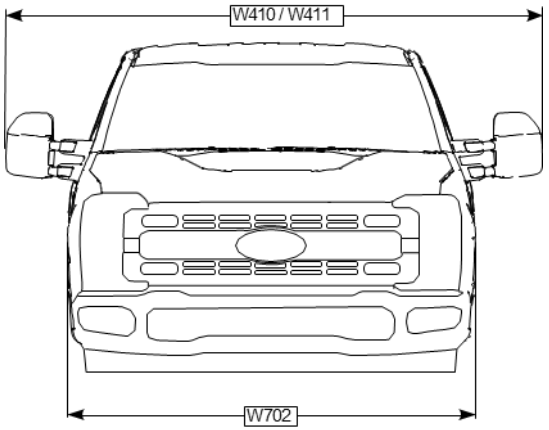
CAB		
CODE	DESCRIPTION	4x2 / 4x4
H122	WINDSHIELD ANGLE (DEGREES)	53.6
H701	FRONT BUMPER HEIGHT - W/O VALENCE	370 [14.6]
H701	FRONT BUMPER HEIGHT - W/ VALENCE	414/513 [16.3/20.2]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS)-SRW	2031 [79.9]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS)-DRW	2438 [96.0]
W410	VEHICLE WIDTH (CAB WIDTH MAX WITH: MANUAL MIRRORS)	2689 [105.9]
W410	VEHICLE WIDTH (CAB WIDTH MAX WITH: TRAILER TOW MIRRORS – EXTENDED)	2817 [110.9]
W411	VEHICLE WIDTH (CAB WIDTH MAX WITH: TRAILER TOW MIRRORS – FOLDED)	2167 [85.3]
W702	FRONT BUMPER WIDTH	1982 [78.0]

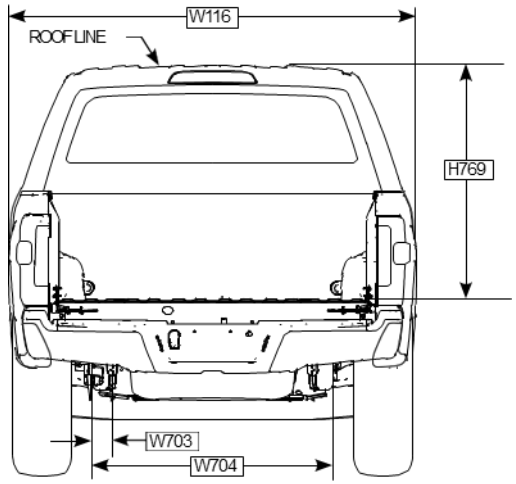
NOTE- [ ] DIMENSION ARE INCHES

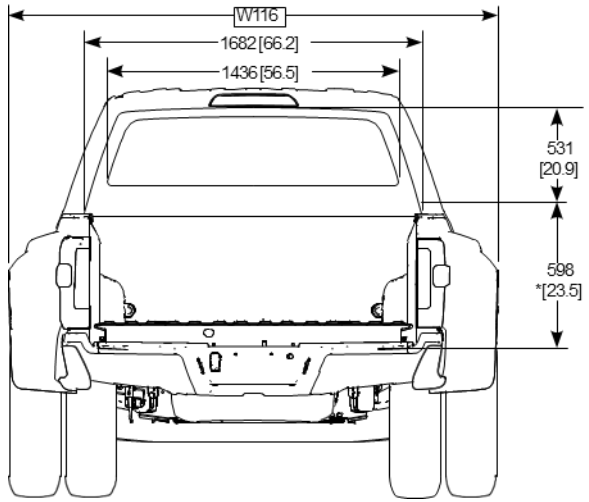
Body Builders Layout Book

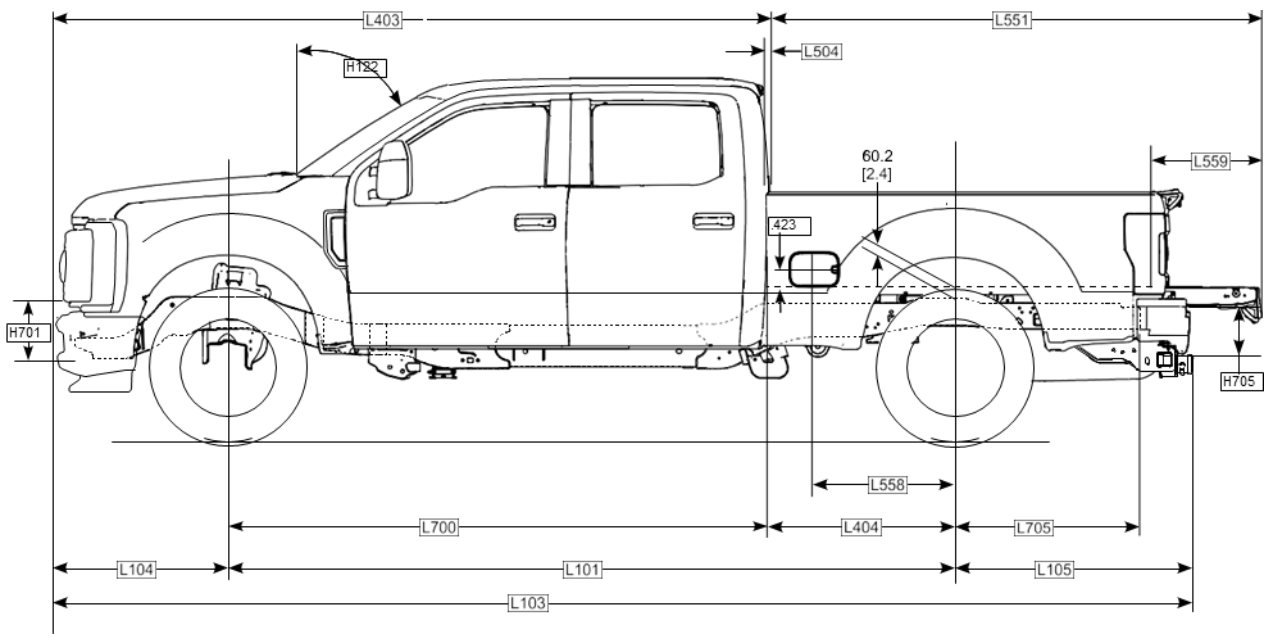
SUPER DUTY

PICKUP DIMENSIONAL DATA - CREW CAB









CHASSIS			
CODE	DESCRIPTION	SWB	LWB
L101	WHEELBASE	4059 [159.8]	4470 [176.0]
L103	VEHICLE LENGTH	6351 [250.0]	6762[266.6]
L104	FRONT OVERHANG	971 [38.2]	971 [38.2]
L105	REAR OVERHANG	1321 [52.0]	1321 [52.0]
L403	FRONT OF BUMPER TO BACK OF CAB	4016 [158.1]	4016 [158.1]
L404	CAB TO C_L OF REAR AXLE	1014 [39.9]	1425 [56.1]
L700	C_L OF FRONT AXLE TO BACKOF CAB	3045 [119.9]	3045 [119.9]
L705	C_L OF REAR AXLE TO REAR END OF FRAME	1055 [41.5]	1055 [41.5]
W703	FRAME RAIL WIDTH (Nominal at CL of rear axle)	61 [2.4]	61 [2.4]
W704	REAR FRAME WIDTH (Nominal at CL of rear axle)	958 [37.7]	958 [37.7]

PICKUP			
CODE	DESCRIPTION	SWB	LWB
	NOMINAL CARGO BODY SIZE	6.75 FT	8 FT
H704	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO C_L OF FUEL FILLER DOOR	97 [3.8]	113 [4.4]
H705	REAR BUMPER HEIGHT	306 [12.0]	306 [12.0]
H769	TOP OF PICKUP BOX FLOOR (HIGHEST POINT) TO TOP OF CAB @ CL OF REAR AXLE	1173 [46.2]	1173 [46.2]
L504	CAB TO PICKUP BOX	16 [0.6]	16 [0.6]
L551	BOX OVERALL LENGTH TO OPEN TAILGATE	2807 [110.5]	3218 [126.7]
L558	C_L OF REAR AXLE TO C_L OF FUEL FILLER DOOR	782 [30.8]	1193 [47.0]
L559	LENGTH OF OPEN TAILGATE (From end of box floor)	644 [25.4]	644 [25.4]

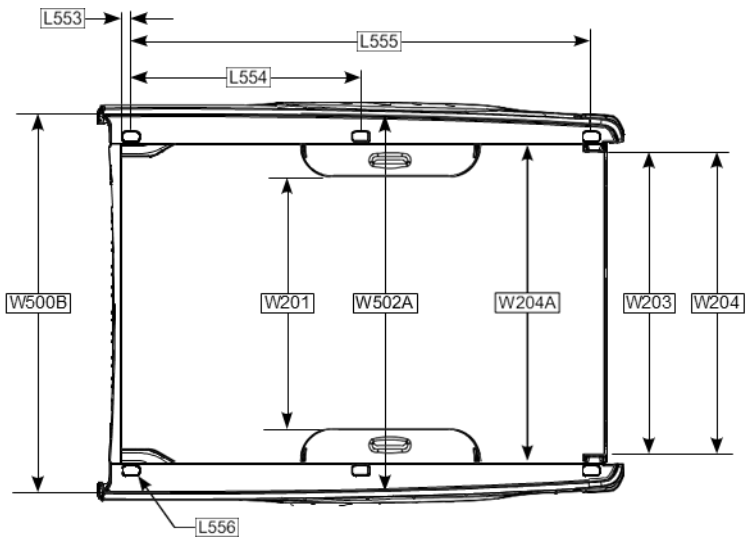
CAB		
CODE	DESCRIPTION	4x2 / 4x4
H122	WINDSHIELD ANGLE (DEGREES)	53.6
H701	FRONT BUMPER HEIGHT - W/O VALENCE	370 [14.6]
H701	FRONT BUMPER HEIGHT - W/ VALENCE	414/513 [16.3/20.2]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS) - SRW	2031 [80.0]
W116	VEHICLE BODY WIDTH (MAX W/O MIRRORS) - DRW	2438 [96.0]
W410	VEHICLE WIDTH (CAB WIDTH MAX WITH: MANUAL MIRRORS)	2689 [105.9]
W410	VEHICLE WIDTH (CAB WIDTH MAX WITH: TRAILER TOW MIRRORS – EXTENDED)	2817 [110.9]
W411	VEHICLE WIDTH (CAB WIDTH MAX WITH: TRAILER TOW MIRRORS – FOLDED)	2167 [85.3]
W702	FRONT BUMPER WIDTH	1982 [78.0]

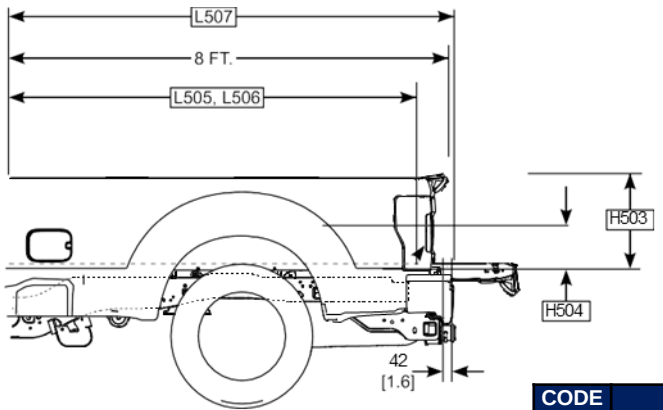
NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

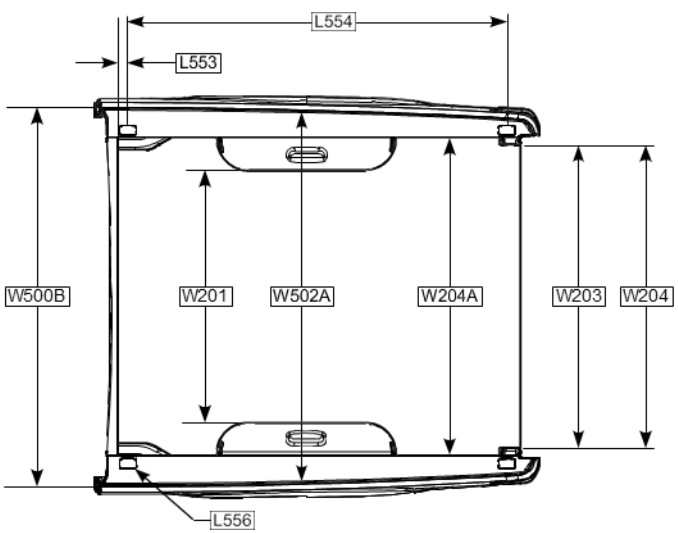
SUPER DUTY

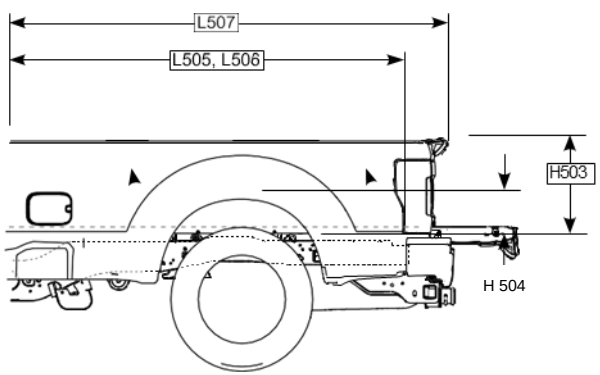
PICKUP DIMENSIONAL DATA - PICKUP BOX





8 FT. BOX





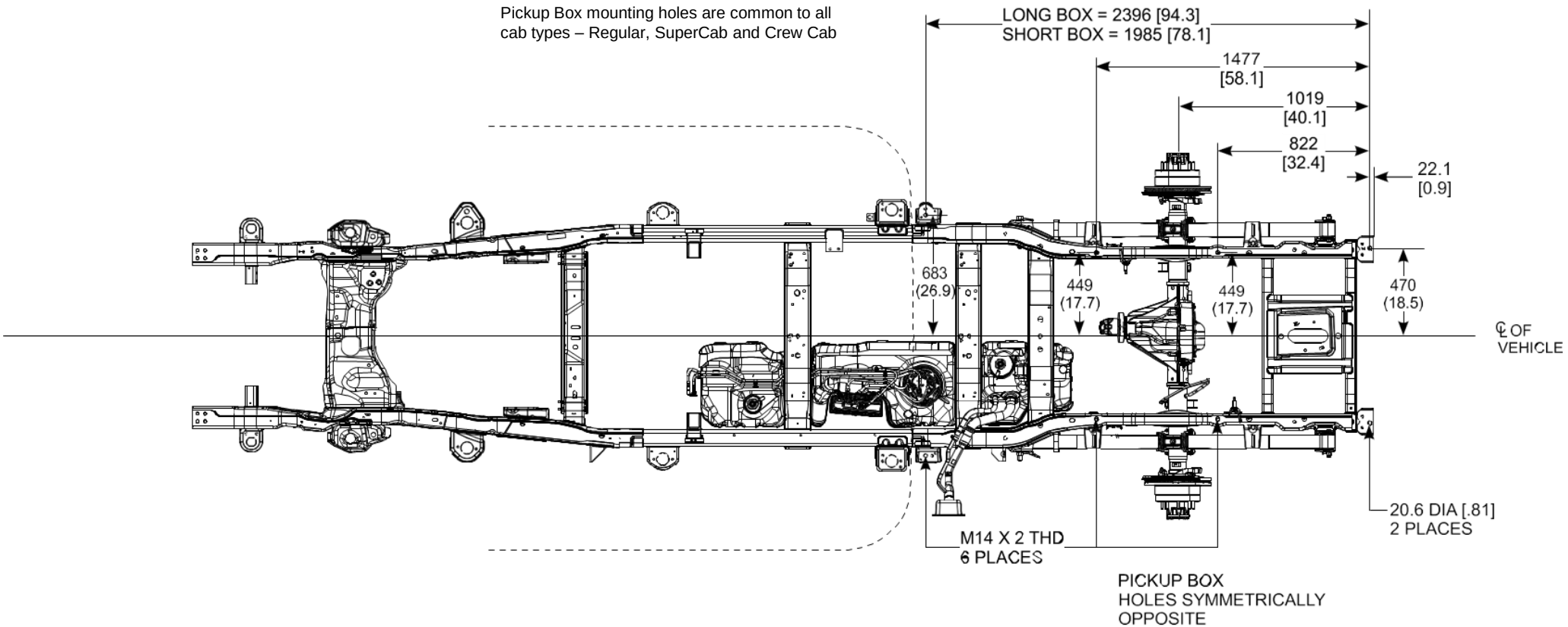
6.75 FT. BOX

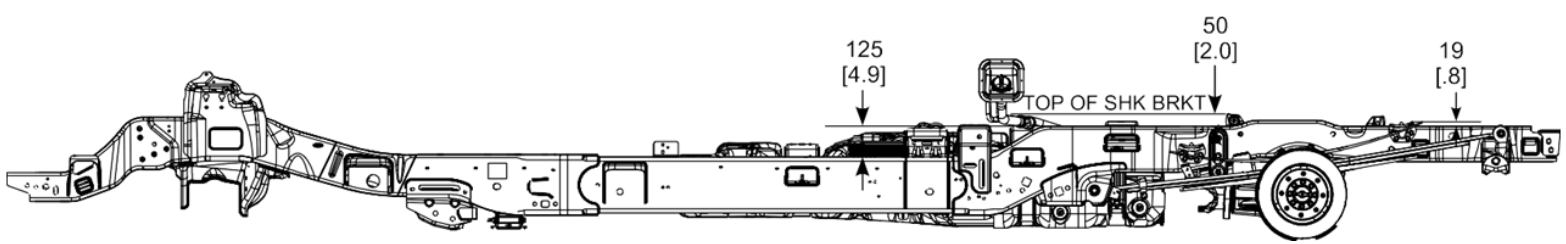
CODE	DESCRIPTION	6.75'	8'
H503	CARGO BODY HEIGHT WITH MOLDING (Measured from top of floor beads)	535 [21.1]	535 [21.1]
H504	WHEELHOUSE HEIGHT	233 [9.2]	233 [9.2]
L505	CARGO BODY LENGTH @ FLOOR	2081 [81.9]	2492 [98.1]
L506	CARGO BODY LENGTH @ TOP (BELT)	2037 [80.2]	2448 [96.4]
L507	CARGO BODY OVERALL LENGTH	2274 [89.5]	2685 [105.7]
L553	INSIDE FRONT OF BOX TO CL OF STAKE #1 (Measured at Top of Box)	48 [1.9]	48 [1.9]
L554	CL OF STAKE #1 TO CL OF STAKE #2	1919 [75.6]	1168 [46.0]
L555	CL OF STAKE #1 TO CL OF STAKE #3	NA NA	2330 [-91.7]
L556	STAKE POCKET SIZE (L X W)	59 X 44 [2.3 x 1.7]	59 X 44 [2.3 x 1.7]
W201	CARGO WIDTH @ WHEELHOUSE	1282 [50.5]	1282 [50.5]
W203	REAR OPENING WIDTH @ FLOOR	1536 [60.5]	1536 [60.5]
W204	REAR OPENING WIDTH @ TOP	1536 [60.5]	1536 [60.5]
W204A	REAR OPENING WIDTH @ TOP (BELT) (Measured between box top moldings)	1609 [63.3]	1609 [63.3]
W500B	CARGO BODY MAXIMUM INSIDE WIDTH @ FLOOR	1698 [66.9]	1698 [66.9]
W502A	CARGO BODY MAXIMUM INSIDE WIDTH @ CL OF REAR AXLE	1698 [66.9]	1698 [66.9]
V5	CARGO VOLUME – LITERS [CU. FT.]	1851 [65.4]	2224 [78.5]

NOTE- [ ] DIMENSION ARE INCHES

PICKUP DIMENSIONAL DATA - PICKUP BOX DELETE AND REMOVAL

Pickup Box mounting holes are common to all cab types – Regular, SuperCab and Crew Cab

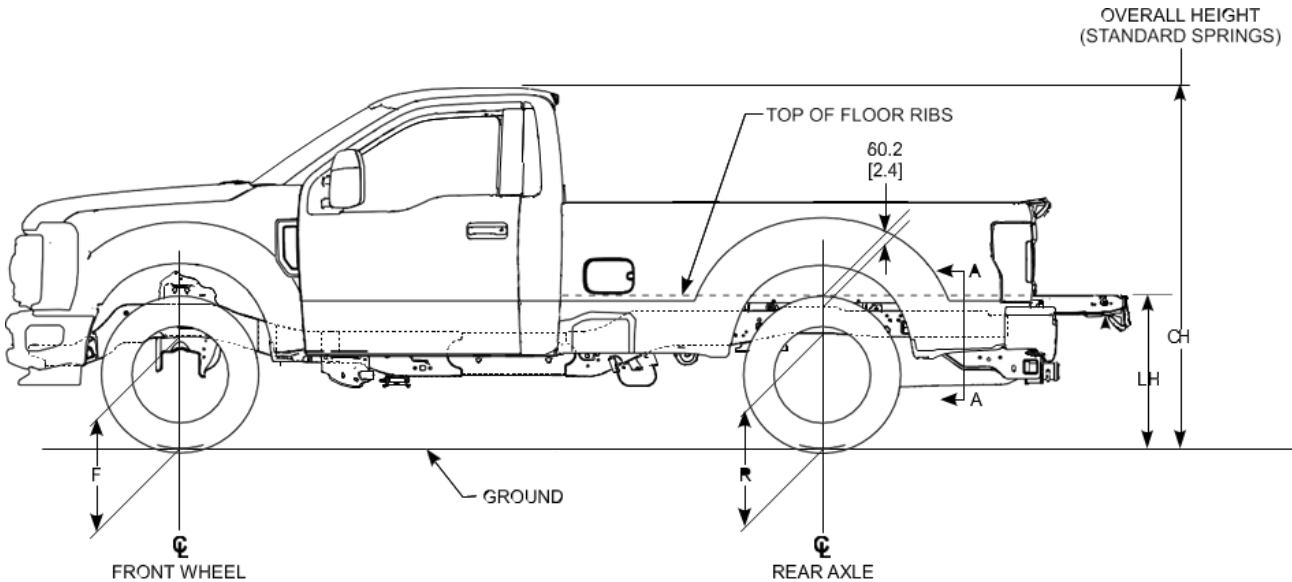


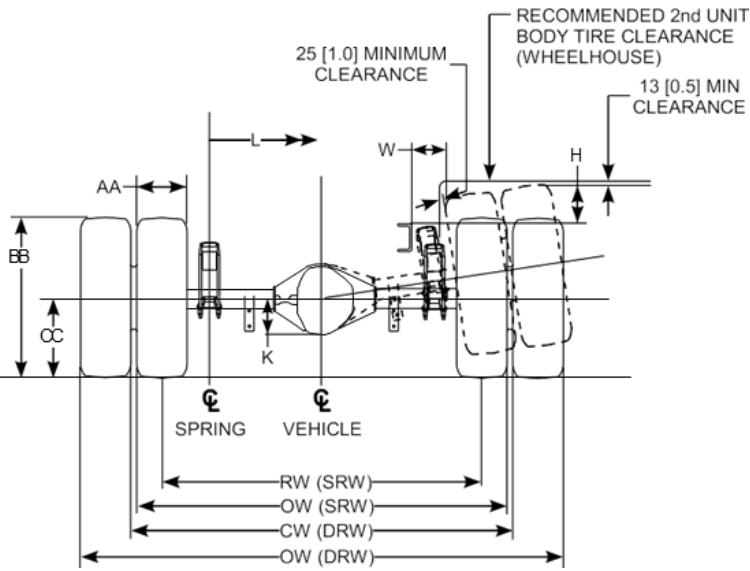


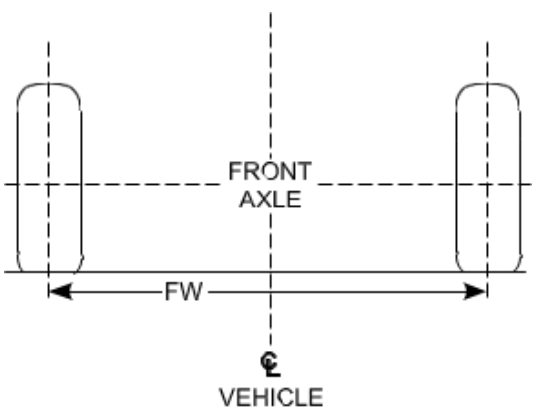
NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY

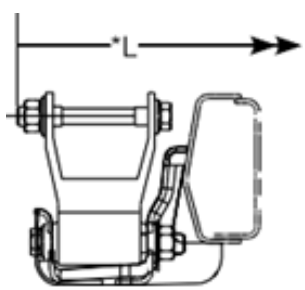
PICKUP AXLE / TIRE / VEHICLE HEIGHT DATA - REGULAR CAB







FRONT TREAD WIDTH



SECTION A
ENLARGED

NOTES:

- F AND R VEHICLE HEIGHT DIMENSIONS ARE FROM GROUND TO BOTTOM OF FRAME.
- LH IS FROM GROUND TO TOP OF FLOOR RIBS
- *H IS TOP OF FRAME AT CENTER LINE OF REAR AXLE TO TOP OF THE TIRE IN JOUNCE
- *L IS FROM THE OUTSIDE EDGE OF SHACKLE EYEBOLT
- *W IS OUTSIDE OF FRAME TO TOP OF TIRE IN JOUNCE

Body Builders Layout Book

SUPER DUTY

PICKUP AXLE / TIRE / VEHICLE HEIGHT DATA - REGULAR CAB (CONT)

MODEL	Standard GVWR (pounds)	WB (inches)	Base Tire	Units	CC (SLR)	Tire Diameter	F Height at Front Axle (1) Base Curb (2)	F Height at Front Axle (1) Loaded (3)	R Height at Rear Axle (1) Base Curb (2)	R Height at Rear Axle (1) Loaded (3)	LH (1) Base Curb (2)	LH (1) Loaded (3)	CH (1) Base Curb (2)	CH (1) Loaded (3)	K	L	L*	AA (5)	BB	FW (4)	RW	OW	CW (6)	*H	*W
F250 Reg Cab 4X2	10000 SRW	141.6	LT245/75R17E	mm	375	807	541	518	662	536	928	754	2005	1928	180 (C)	1144	1314	265	779	1735	1706	1994	---	221	210
				inches	14.8	31.8	21.3	20.4	26.1	21.1	36.5	29.7	78.9	75.9	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	8.7	8.3
F250 Reg Cab 4x4	10000 SRW	141.6	LT245/75R17E	mm	375	807	621	591	707	584	956	790	2066	1987	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
				inches	14.8	31.8	24.4	23.3	27.8	23	37.6	31.1	81.3	78.2	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	5.6	8.6
F350 Reg Cab 4x2	10000 SRW	141.6	LT245/75R17E	mm	375	807	537	517	656	536	921	754	2000	1927	180 (C)	1144	1314	265	779	1735	1706	1994	---	221	210
				inches	14.8	31.8	21.1	20.4	25.8	21.1	36.2	29.7	78.7	75.9	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	8.7	8.3
	14000 DRW	141.6		mm	375	807	546	517	677	543	947	764	2015	1931	183	1144	1314	254	779	1755	---	2434	1898	218	188
				inches	14.8	31.8	21.5	20.3	26.6	21.4	37.3	30.1	79.3	76	7.2	45	51.7	10	31	69.1	---	95.8	74.7	8.6	7.4
F350 Reg Cab 4x4	10000 SRW	141.6	LT245/75R17E	mm	375	807	618	591	701	584	949	790	2062	1987	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
				inches	14.8	31.8	24.3	23.3	27.6	23	37.4	31.1	81.2	78.2	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	5.6	8.6
	14000 DRW	141.6		mm	375	807	617	591	707	592	959	801	2065	1991	183	1144	1314	254	779	1756	---	2434	1898	152	194
				inches	14.8	31.8	24.3	23.3	27.9	23.3	37.8	31.5	81.3	78.4	7.2	45	51.7	10	31	69.1	---	95.8	74.7	6	7.6
F-450 Reg Cab 4X2	14000 DRW	141.6	225/70R19.5G	mm	383	814	638	611	723	621	972	835	2083	2016	183	1144	1314	235	787	1901	-	2404	1898	151	206
				inches	15.1	32	25.1	24.1	28.5	24.4	38.3	32.9	82	79.4	7.2	45	51.7	9.3	31	74.8	-	94.6	74.7	5.9	8.1
F-450 Reg Cab 4X4	14000 DRW	141.6	225/70R19.5G	mm	383	814	639	6610	722	621	970	835	2083	2016	183	1144	1314	235	787	1901	-	2404	1898	151	206
				inches	15.1	32	25.2	260.2	28.4	24.4	38.2	32.9	82	79.4	7.2	45	51.7	9.3	31	74.8	-	94.6	74.7	5.9	8.1

1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances
2) Height at Base Curb Weight with standard springs.
3) Loaded Height at spring rating with standard springs.
4) FW for F350 DRW with Aluminum rim = 1766mm [69.5in] (4x2) and 1767mm [69.6in] (4x4). FW for F450/F550 DRW with Aluminum rim = 1916mm [75.4in].
5) AA is maximum grown width at maximum tire pressure and load.
6) CW is DRW Rear Track width measured at rim mating flange surface.

(A) F450/F550 RC 60CA with 42.2" Aft Axle Frame Extension.
(B) F550 RC 84CA with 32.4" Aft Axle Frame Extension.
(C) K (SRW) = 180mm [7.1in] for 6.7L Diesel, 165mm [6.5in] for 6.8L Gas.

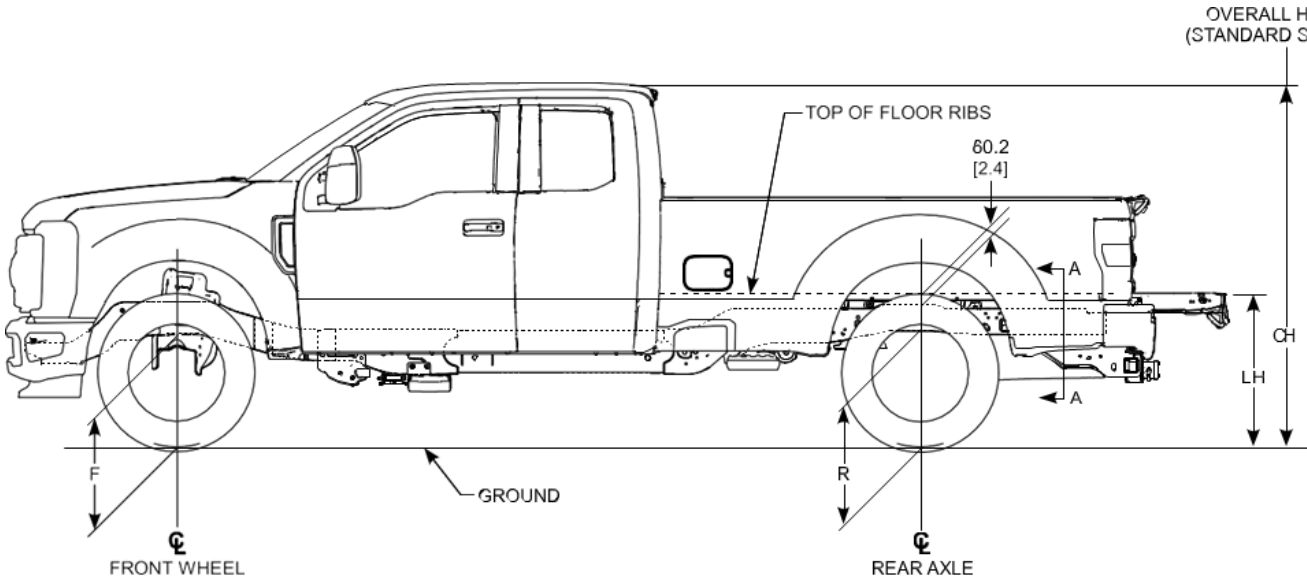
SRW – Single Rear Wheels
DRW – Dual Rear W heels

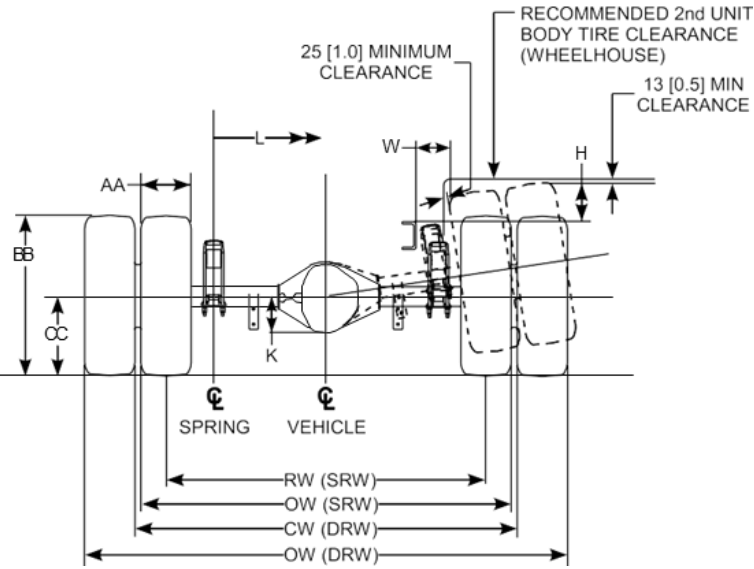
*H - Top of frame at C/L of rear axle to top of tire in jounce.
*L - From outside edge of shackle eyebolt
*W - Outside of frame to top of tire in jounce.

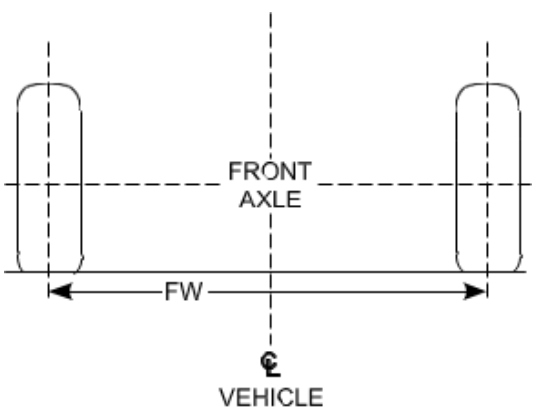
NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY

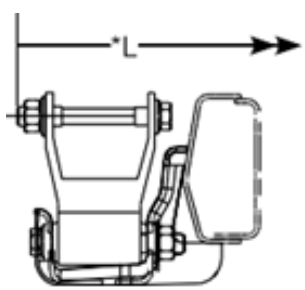
PICKUP AXLE / TIRE / VEHICLE HEIGHT DATA - SUPERCAB







FRONT TREAD WIDTH



SECTION A
ENLARGED

NOTES:

- F AND R VEHICLE HEIGHT DIMENSIONS ARE FROM GROUND TO BOTTOM OF FRAME.
- LH IS FROM GROUND TO TOP OF FLOOR RIBS
- *H IS TOP OF FRAME AT CENTER LINE OF REAR AXLE TO TOP OF THE TIRE IN JOUNCE
- *L IS FROM THE OUTSIDE EDGE OF SHACKLE EYEBOLT
- *W IS OUTSIDE OF FRMAE TO TOP OF TIRE IN JOUNCE

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

PICKUP AXLE / TIRE / VEHICLE HEIGHT DATA - SUPER CAB (CONT)

MODEL	Standard GVWR (pounds)	WB (inches)	Base Tire	Units	CC (SLR)	Tire Diameter	F Height at Front Axle (1)		R Height at Rear Axle (1)		LH (1)		CH (1)		K	L	L*	AA (5)	BB	FW (4)	RW	OW	CW (6)	*H	*W
							Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)											
F250 Super Cab 4x2	10,000	148.0	LT245/75R17E	mm	375	807	542	517	655	536	915	754	2014	1927	180 (C)	1144	1314	265	779	1735	1706	1994	---	221	210
	SRW			inches	14.8	31.8	21.3	20.4	25.8	21.1	36	29.7	79.3	75.9	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	8.7	8.3
	10,000	164.1		mm	375	807	542.1	516	651.4	533.2	905.3	750	2004.9	1924	180 (C)	1144	1314	265	779	1734.7	1706	1994	---	221	210
	SRW			inches	14.8	31.8	21.3	20.3	25.6	21	35.6	29.5	78.9	75.7	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	8.7	8.3
F250 Super Cab 4x4	10,000	148.0	LT245/75R17E	mm	375	807	617	591	700	584	946	790	2069	1984	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
	SRW			inches	14.8	31.8	24.3	23.3	27.5	23	37.2	31.1	81.4	78.1	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	5.6	8.6
	10,000	164.1		mm	375	807	624	589.6	700.5	584.2	941.1	791.8	2067.4	1984.1	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
	SRW			inches	14.8	31.8	24.6	23.2	27.6	23	37.1	31.2	81.4	78.1	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	5.6	8.6
F350 Super Cab 4x2	10,000	148.0	LT245/75R17E	mm	375	807	538	517	650	536	909	754	2009	1927	180 (C)	1144	1314	265	779	1735	1706	1994	---	221	210
	SRW			inches	14.8	31.8	21.2	20.4	25.6	21.1	35.8	29.7	79.1	75.9	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	8.7	8.3
	10,000	164.1		mm	375	807	542.7	516	646.4	533.2	898	750	2002.2	1924	180 (C)	1144	1314	265	779	1734.7	1706	1994	---	221	210
	SRW			inches	14.8	31.8	21.4	20.3	25.4	21	35.4	29.5	78.8	75.7	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	8.7	8.3
	14,000	164.1		mm	375	807	545	515	651	540	904	760	2006	1928	183	1144	1314	254	779	1755	---	2434	1898	218	188
	DRW			inches	14.8	31.8	21.5	20.3	25.6	21.3	35.6	29.9	79	75.9	7.2	45	51.7	10	31	69.1	---	95.8	74.7	8.6	7.4
F350 Super Cab 4x4	10,000	148.0	LT245/75R17E	mm	375	807	613	591	695	584	941	790	2064	1984	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
	SRW			inches	14.8	31.8	24.1	23.3	27.4	23	37.1	31.1	81.3	78.1	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	5.6	8.6
	10,000	164.1		mm	375	807	620.2	589.6	695.5	584.2	935.7	791.8	2062.9	1984.1	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
	SRW			inches	14.8	31.8	24.4	23.2	27.4	23	36.8	31.2	81.2	78.1	7.1	45	51.7	10.4	31	68.3	67.2	78.5	---	5.6	8.6
	14,000	164.1		mm	375	807	620	590	701	592	944	802	2066	1989	183	1144	1314	254	779	1756	---	2434	1898	152	194
	DRW			inches	14.8	31.8	24.4	23.2	27.6	23.3	37.2	31.6	81.3	78.3	7.2	45	51.7	10	31	69.1	---	95.8	74.7	6	7.6

1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances
2) Height at Base Curb Weight with standard springs.
3) Loaded Height at spring rating with standard springs.
4) FW for F350 DRW with Aluminum rim = 1766mm [69.5in] (4x2) and 1767mm [69.6in] (4x4). FW for F450/F550 DRW with Aluminum rim = 1916mm [75.4in].
5) AA is maximum grown width at maximum tire pressure and load.
6) CW is DRW Rear Track width measured at rim mating flange surface.

(A) F450/F550 RC 60CA with 42.2" Aft Axle Frame Extension.
(B) F550 RC 84CA with 32.4" Aft Axle Frame Extension.
(C) K (SRW) = 180mm [7.1in] for 6.7L Diesel, 165mm [6.5in] for 6.8L Gas.

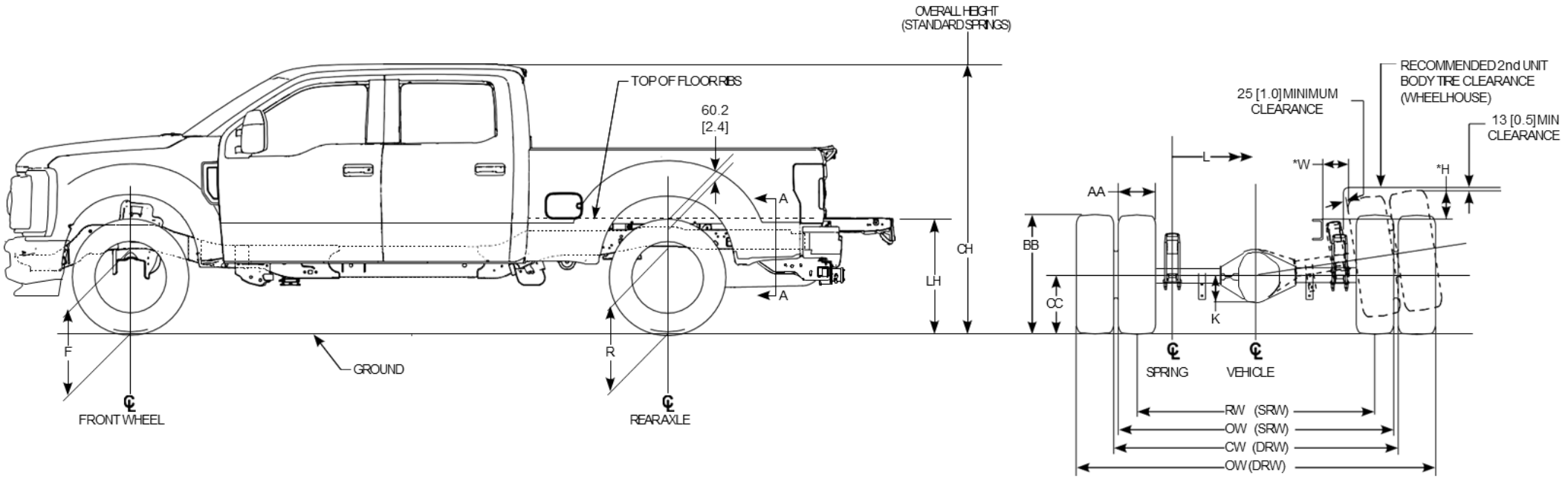
SRW – Single Rear Wheels
DRW – Dual Rear W heels

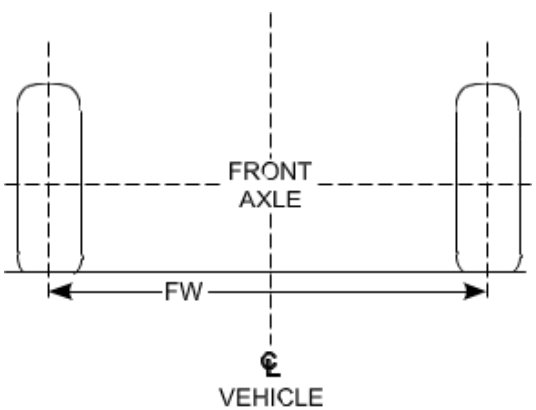
*H - Top of frame at C/L of rear axle to top of tire in jounce.
*L - From outside edge of shackle eyebolt
*W - Outside of frame to top of tire in jounce.

NOTE- [ ] DIMENSION ARE INCHES

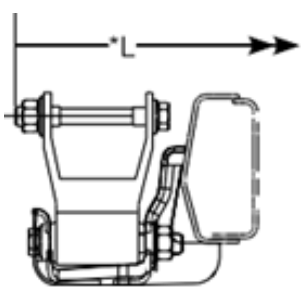
SUPER DUTY

PICKUP AXLE / TIRE / VEHICLE HEIGHT DATA - CREWCAB





FRONT TREAD WIDTH



SECTION A
ENLARGED

NOTES:

- F AND R VEHICLE HEIGHT DIMENSIONS ARE FROM GROUND TO BOTTOM OF FRAME.
- LH IS FROM GROUND TO TOP OF FLOOR RIBS
- *H IS TOP OF FRAME AT CENTER LINE OF REAR AXLE TO TOP OF THE TIRE IN JOUNCE
- *L IS FROM THE OUTSIDE EDGE OF SHACKLE EYEBOLT
- *W IS OUTSIDE OF FRAME TO TOP OF TIRE IN JOUNCE

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

PICKUP AXLE / TIRE / VEHICLE HEIGHT DATA - CREW CAB (CONT)

MODEL	Standard GVWR (pounds)	WB (inches)	Base Tire	Units	CC (SLR)	Tire Diameter	F Height at Front Axle (1)		R Height at Rear Axle (1)		LH (1)		CH (1)		K	L	L*	AA (5)	BB	FW (4)	RW	OW	CW (6)	*H	*W
							Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)											
F250 Crew Cab 4x2	10,000 SRW	159.8	LT245/75R17E	mm	375	807	539	517	650	533	906	750	2013	1926	180 (C)	1144	1314	265	779	1735	1706	1994	---	221	210
				inches	14.8	31.8	21.2	20.4	25.6	21	35.7	29.5	79.3	75.8	7.1	45	51.7	10.4	30.7	68.3	67.2	78.5	---	8.7	8.3
	10,000 SRW	176		mm	375	807	543.1	516	644.5	533.2	893.3	749.8	2005.4	1925.5	180 (C)	1144	1314	265	779	1734.7	1706	1994	---	221	210
				inches	14.8	31.8	21.4	20.3	25.4	21	35.2	29.5	79	75.8	7.1	45	51.7	10.4	30.7	68.3	67.2	78.5	---	8.7	8.3
F250 Crew Cab 4x4	10,000 SRW	159.8	LT245/75R17E	mm	375	807	614	591	699	584	944	791	2071	1984	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
				inches	14.8	31.8	24.2	23.3	27.5	23	37.2	31.1	81.5	78.1	7.1	45	51.7	10.4	30.7	68.3	67.2	78.5	---	5.6	8.6
	10,000 SRW	176		mm	375	807	618.4	589.7	695.8	584.3	935.5	792.3	2065.7	1984.9	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
				inches	14.8	31.8	24.3	23.2	27.4	23	36.8	31.2	81.3	78.1	7.1	45	51.7	10.4	30.7	68.3	67.2	78.5	---	5.6	8.6
F350 Crew Cab 4x2	10,000 SRW	159.8	LT245/75R17E	mm	375	807	540	517	643	533	896	750	2009	1926	180 (C)	1144	1314	265	779	1735	1706	1994	---	221	210
				inches	14.8	31.8	21.2	20.3	25.3	21	35.3	29.5	79.1	75.8	7.1	45	51.7	10.4	30.7	68.3	67.2	78.5	---	8.7	8.3
	10,000 SRW	176		mm	375	807	541.7	515.3	640.6	533.2	888.6	750.1	2002.5	1925.2	180 (C)	1144	1314	265	779	1734.7	1706	1994	---	221	210
				inches	14.8	31.8	21.3	20.3	25.2	21	35	29.5	78.8	75.8	7.1	45	51.7	10.4	30.7	68.3	67.2	78.5	---	8.7	8.3
	14,000 DRW	176		mm	375	807	546	515	648	540	898	760	2009	1929	183	1144	1314	254	779	1755	---	2434	1898	218	188
				inches	14.8	31.8	21.5	20.3	25.5	21.3	35.3	29.9	79.1	76	7.2	45	51.7	10	30.7	69.1	---	95.8	74.7	8.6	7.4
F350 Crew Cab 4x4	10,000 SRW	159.8	LT245/75R17E	mm	375	807	609	590	693	584	937	792	2065	1984	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
				inches	14.8	31.8	24	23.2	27.3	23	36.9	31.2	81.3	78.1	7.1	45	51.7	10.4	30.7	68.3	67.2	78.5	---	5.6	8.6
	10,000 SRW	176		mm	375	807	615	589.7	689.4	584.3	928	792.3	2060.4	1984.9	180 (C)	1144	1314	265	779	1736	1706	1994	---	143	218
				inches	14.8	31.8	24.2	23.2	27.1	23	36.5	31.2	81.1	78.1	7.1	45	51.7	10.4	30.7	68.3	67.2	78.5	---	5.6	8.6
	14,000 DRW	176		mm	375	807	625	588	699	592	937	803	2070	1989	183	1144	1314	254	779	1756	---	2434	1898	152	194
				inches	14.8	31.8	24.6	23.1	27.5	23.3	36.9	31.6	81.5	78.3	7.2	45	51.7	10	30.7	69.1	---	95.8	74.7	6	7.6
F-450 Crew Cab 4X2	14,000 DRW	176	225/70R19.5G	mm	383	814	639	610	703	622	943	837	2073	2016	183	1144	1314	235	787	1901	-	2404	1898	151	206
				inches	15.1	32	25.1	24	27.7	24.5	37.1	33	81.6	79.4	7.2	45	51.7	9.3	31	74.8	-	94.6	74.7	5.9	8.1
F-450 Crew Cab 4X4	14,000 DRW	176	225/70R19.5G	mm	383	814	640	608	715	623	953	838	2086	2016	183	1144	1314	235	787	1901	-	2404	1898	151	206
				inches	15.1	32	25.2	24	28.1	24.5	37.5	33	82.1	79.4	7.2	45	51.7	9.3	31	74.8	-	94.6	74.7	5.9	8.1

1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances
2) Height at Base Curb Weight with standard springs.
3) Loaded Height at spring rating with standard springs.
4) FW for F350 DRW with Aluminum rim = 1766mm [69.5in] (4x2) and 1767mm [69.6in] (4x4). FW for F450/F550 DRW with Aluminum rim = 1916mm [75.4in].
5) AA is maximum grown width at maximum tire pressure and load.
6) CW is DRW Rear Track width measured at rim mating flange surface.

(A) F450/F550 RC 60CA with 42.2" Aft Axle Frame Extension.
(B) F550 RC 84CA with 32.4" Aft Axle Frame Extension.
(C) K (SRW) = 180mm [7.1in] for 6.7L Diesel, 165mm [6.5in] for 6.8L Gas.

SRW – Single Rear Wheels
DRW – Dual Rear W heels

*H - Top of frame at C/L of rear axle to top of tire in jounce.
*L - From outside edge of shackle eyebolt
*W - Outside of frame to top of tire in jounce.

NOTE- [ ] DIMENSION ARE INCHES

Ford PRO

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-350 SRW

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[2] (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-350 CC SRW	Reg	145.0	60	4x2	10,500	7.3L	4950	3263	2231	5494	3950	5300	6780	6780	2794	27200
				4x4	10,900	7.3L	4890	3651	2294	5945	4400	5990	6780	6780	2343	27200
					11,500	6.7L	4810	4170	2450	6620	4800	5990	6780	6780	1668	31000
	Super	167.5	60	4x2												
				4x4	11,300	7.3L	4880	3839	2514	6353	4800	5990	6780	6780	1935	27200
					11,500	6.7L	4300	4421	2698	7119	5600	5990	6780	6780	1169	31000
	Crew	179.4	60	4x2	10,900	7.3L	4870	3543	2518	6061	4550	5300	6780	6780	2227	27200
					11,500	6.7L	4560	4193	2672	6865	5300	5300	6780	6780	1423	31000
				4x4	11,400	7.3L	4850	3925	2553	6478	5200	5990	6780	6780	1810	27200
					11,500	6.7L	4240	4502	2683	7185	5600	5990	6780	6780	1103	31000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-350 DRW

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[2] (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-350 CC DRW	Reg	145.0	60	4x2	14,000	7.3L	8040	3290	2603	5893	4100	5300	10300	10300	2395	27500
						6.7L	7360	3865	2705	6570	4700	5300	10300	10300	1718	34500
				4x4		7.3L	7700	3522	2711	6233	4400	5990	10300	10300	2055	27500
						6.7L	6970	4223	2737	6960	5200	5990	10300	10300	1328	34500
		169.0	84	4x2		7.3L	7960	3376	2595	5971	4550	5300	10300	10300	2317	27500
						6.7L	7260	3999	2672	6671	5300	5300	10300	10300	1617	34500
				4x4		7.3L	7560	3746	2625	6371	5200	5990	10300	10300	1917	27500
						6.7L	6850	4369	2702	7071	5600	5990	10300	10300	1217	34500
	Super	167.5	60	4x2		7.3L	7630	3531	2773	6304	4550	5300	10300	10300	1984	27500
				4x4		7.3L	7240	3874	2816	6690	5200	5990	10300	10300	1598	27500
						6.7L	6520	4476	2927	7403	5600	5990	10300	10300	885	34500
	Crew	179.4	60	4x2		7.3L	7540	3590	2802	6392	4550	5300	10300	10300	1896	27500
						6.7L	6850	4177	2901	7078	5300	5300	10300	10300	1210	34500
				4x4		7.3L	7140	3960	2832	6792	5200	5990	10300	10300	1496	27500
						6.7L	6440	4547	2931	7478	5600	5990	10300	10300	810	34500

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-450 DRW (15K, 16K GVWR)

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[2] (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-450 CC DRW	Reg	145.0	60	4x2	15,000	7.3L	8320	3602	3004	6606	4400	7500	12880	12880	1682	30000
						6.7L	7550	4152	3217	7369	5200	7500	12880	12880	919	39000
				4x4		7.3L	8070	3880	2978	6858	4800	7500	12880	12880	1430	30000
						6.7L	7340	4503	3079	7582	5600	7500	12880	12880	706	39000
		169.0	84	4x2		7.3L	8310	3722	2901	6623	5200	7500	12880	12880	1665	30000
						6.7L	7590	4317	3013	7330	5600	7500	12880	12880	958	39000
				4x4		7.3L	7930	4020	2976	6996	5200	7500	12880	12880	1292	30000
						6.7L	7230	4623	3063	7686	6000	7500	12880	12880	602	39000
		193.0	108	4x2		7.3L	8160	3808	2963	6771	5600	7500	12880	12880	1517	30000
						6.7L	7430	4433	3055	7488	6000	7500	12880	12880	800	39000
				4x4		7.3L	7740	4151	3034	7185	6000	7500	12880	12880	1103	30000
						6.7L	6990	4761	3164	7925	6500	7500	12880	12880	363	39000
		205.0	120	4x2		7.3L	8020	3913	2996	6909	5600	7500	12880	12880	1379	30000
						6.7L	7300	4515	3105	7620	6000	7500	12880	12880	668	39000
				4x4		7.3L	7700	4165	3054	7219	6000	7500	12880	12880	1069	30000
						6.7L	6960	4834	3118	7952	6500	7500	12880	12880	336	39000
		145.0	60	4x2	16,000	7.3L	9320	3602	3004	6606	4800	7500	12880	12880	1682	30000
						6.7L	8550	4152	3217	7369	5200	7500	12880	12880	919	39000
				4x4		7.3L	9070	3880	2978	6858	4800	7500	12880	12880	1430	30000
						6.7L	8340	4503	3079	7582	5600	7500	12880	12880	706	39000
		169.0	84	4x2		7.3L	9310	3722	2901	6623	5200	7500	12880	12880	1665	30000
						6.7L	8590	4317	3013	7330	5600	7500	12880	12880	958	39000
				4x4		7.3L	8930	4020	2976	6996	5600	7500	12880	12880	1292	30000
						6.7L	8230	4623	3063	7686	6000	7500	12880	12880	602	39000
		193.0	108	4x2		7.3L	9160	3808	2963	6771	5600	7500	12880	12880	1517	30000
						6.7L	8430	4433	3055	7488	6000	7500	12880	12880	800	39000
				4x4		7.3L	8740	4151	3034	7185	6000	7500	12880	12880	1103	30000
						6.7L	7990	4761	3164	7925	6500	7500	12880	12880	363	39000
		205.0	120	4x2		7.3L	9020	3913	2996	6909	5600	7500	12880	12880	1379	30000
						6.7L	8300	4515	3105	7620	6500	7500	12880	12880	668	39000
				4x4		7.3L	8700	4165	3054	7219	6000	7500	12880	12880	1069	30000
						6.7L	7960	4834	3118	7952	6500	7500	12880	12880	336	39000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-450 DRW (15K & 16K GVWR) (CONT)

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD(1) (lb.)	BASE CURB WEIGHT (lb.)			GAWR(2) (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-450 CC DRW	Super	167.5	60	4x2	15,000	7.3L	7930	3850	3146	6996	5200	7500	12880	12880	1292	30000
				4x4		7.3L	7620	4121	3177	7298	5200	7500	12880	12880	990	30000
						6.7L	6920	4731	3269	8000	6000	7500	12880	12880	288	39000
		191.5	84	4x2												
						6.7L	7110	4585	3221	7806	6000	7500	12880	12880	482	39000
				4x4		7.3L	7530	4269	3125	7394	5600	7500	12880	12880	894	30000
	Crew					6.7L	6780	4882	3250	8132	6500	7500	12880	12880	156	39000
		179.8	60	4x2		7.3L	7860	3883	3183	7066	5200	7500	12880	12880	1222	30000
						6.7L	7150	4407	3359	7766	5600	7500	12880	12880	522	39000
				4x4		7.3L	7520	4209	3189	7398	5200	7500	12880	12880	890	30000
						6.7L	6770	4803	3343	8146	6000	7500	12880	12880	142	39000
		203.4	84	4x2		7.3L	7750	4035	3143	7178	5600	7500	12880	12880	1110	30000
						6.7L	6910	4684	3322	8006	6000	7500	12880	12880	282	39000
				4x4		7.3L	7440	4300	3178	7478	5600	7500	12880	12880	810	30000
						6.7L	6710	4935	3269	8204	6500	7500	12880	12880	84	39000
	Super	167.5	60	4x2	16,000	7.3L	8930	3850	3146	6996	5200	7500	12880	12880	1292	30000
				4x4		7.3L	8620	4121	3177	7298	5200	7500	12880	12880	990	30000
						6.7L	7920	4731	3269	8000	6000	7500	12880	12880	288	39000
		191.5	84	4x2												
						6.7L	8110	4585	3221	7806	6000	7500	12880	12880	482	39000
				4x4		7.3L	8530	4269	3125	7394	6000	7500	12880	12880	894	30000
	Crew					6.7L	7780	4882	3250	8132	6500	7500	12880	12880	156	39000
		179.8	60	4x2		7.3L	8860	3883	3183	7066	5200	7500	12880	12880	1222	30000
						6.7L	8150	4407	3359	7766	5600	7500	12880	12880	522	39000
				4x4		7.3L	8520	4209	3189	7398	5200	7500	12880	12880	890	30000
						6.7L	7770	4803	3343	8146	6000	7500	12880	12880	142	39000
		203.4	84	4x2		7.3L	8750	4035	3143	7178	5600	7500	12880	12880	1110	30000
						6.7L	7910	4684	3322	8006	6000	7500	12880	12880	282	39000
				4x4		7.3L	8440	4300	3178	7478	6000	7500	12880	12880	810	30000
						6.7L	7710	4935	3269	8204	6500	7500	12880	12880	84	39000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-450 DRW (16.5K GVWR)

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[2] (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-450 CC DRW	Reg	145.0	60	4x2	16,500	7.3L	9820	3602	3004	6606	4800	7500	12880	12880	1682	30000
						6.7L	9050	4152	3217	7369	5200	7500	12880	12880	919	39000
				4x4		7.3L	9570	3880	2978	6858	4800	7500	12880	12880	1430	30000
						6.7L	8840	4503	3079	7582	5600	7500	12880	12880	706	39000
		169.0	84	4x2		7.3L	9810	3722	2901	6623	5200	7500	12880	12880	1665	30000
						6.7L	9090	4317	3013	7330	5600	7500	12880	12880	958	39000
				4x4		7.3L	9430	4020	2976	6996	5600	7500	12880	12880	1292	30000
						6.7L	8730	4623	3063	7686	6000	7500	12880	12880	602	39000
		193.0	108	4x2		7.3L	9660	3808	2963	6771	5600	7500	12880	12880	1517	30000
						6.7L	8930	4433	3055	7488	6500	7500	12880	12880	800	39000
				4x4		7.3L	9240	4151	3034	7185	6000	7500	12880	12880	1103	30000
						6.7L	8490	4761	3164	7925	6500	7500	12880	12880	363	39000
		205.0	120	4x2		7.3L	9520	3913	2996	6909	6000	7500	12880	12880	1379	30000
						6.7L	8800	4515	3105	7620	6500	7500	12880	12880	668	39000
				4x4		7.3L	9200	4165	3054	7219	6000	7500	12880	12880	1069	30000
						6.7L	8460	4834	3118	7952	6500	7500	12880	12880	336	39000
	Super	167.5	60	4x2		7.3L	9430	3850	3146	6996	5200	7500	12880	12880	1292	30000
				4x4		7.3L	9120	4121	3177	7298	5200	7500	12880	12880	990	30000
						6.7L	8420	4731	3269	8000	6000	7500	12880	12880	288	39000
		191.5	84	4x2												
						6.7L	8610	4585	3221	7806	6000	7500	12880	12880	482	39000
				4x4		7.3L	9030	4269	3125	7394	6000	7500	12880	12880	894	30000
						6.7L	8280	4882	3250	8132	6500	7500	12880	12880	156	39000
	Crew	179.8	60	4x2		7.3L	9360	3883	3183	7066	5200	7500	12880	12880	1222	30000
						6.7L	8650	4407	3359	7766	5600	7500	12880	12880	522	39000
				4x4		7.3L	9020	4209	3189	7398	5600	7500	12880	12880	890	30000
						6.7L	8270	4803	3343	8146	6000	7500	12880	12880	142	39000
		203.4	84	4x2		7.3L	9250	4035	3143	7178	5600	7500	12880	12880	1110	30000
						6.7L	8410	4684	3322	8006	6000	7500	12880	12880	282	39000
				4x4		7.3L	8940	4300	3178	7478	6000	7500	12880	12880	810	30000
						6.7L	8210	4935	3269	8204	6500	7500	12880	12880	84	39000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-550 DRW (17.5K GVWR)

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[2] (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-550 CC DRW	Reg	145.0	60	4x2	17,500	7.3L	10820	3602	3004	6606	4800	7500	13660	13660	1682	30000
						6.7L	10050	4152	3217	7369	5200	7500	13660	13660	919	39000
				4x4		7.3L	10570	3880	2978	6858	4800	7500	13660	13660	1430	30000
						6.7L	9840	4503	3079	7582	5600	7500	13660	13660	706	39000
		169.0	84	4x2		7.3L	10810	3722	2901	6623	5200	7500	13660	13660	1665	30000
						6.7L	10090	4317	3013	7330	6000	7500	13660	13660	958	39000
				4x4		7.3L	10430	4020	2976	6996	5600	7500	13660	13660	1292	30000
						6.7L	9730	4623	3063	7686	6000	7500	13660	13660	602	39000
		193.0	108	4x2		7.3L	10660	3808	2963	6771	6000	7500	13660	13660	1517	30000
						6.7L	9930	4433	3055	7488	6500	7500	13660	13660	800	39000
				4x4		7.3L	10240	4151	3034	7185	6000	7500	13660	13660	1103	30000
						6.7L	9490	4761	3164	7925	6500	7500	13660	13660	363	39000
		205.0	120	4x2		7.3L	10520	3913	2996	6909	6000	7500	13660	13660	1379	30000
						6.7L	9800	4515	3105	7620	6500	7500	13660	13660	668	39000
				4x4		7.3L	10200	4165	3054	7219	6000	7500	13660	13660	1069	30000
						6.7L	9460	4834	3118	7952	7000	7500	13660	13660	336	39000
	Super	167.5	60	4x2		7.3L	10430	3850	3146	6996	5200	7500	13660	13660	1292	30000
				4x4		7.3L	10120	4121	3177	7298	5200	7500	13660	13660	990	30000
						6.7L	9420	4731	3269	8000	6000	7500	13660	13660	288	39000
		191.5	84	4x2												
						6.7L	9610	4585	3221	7806	6500	7500	13660	13660	482	39000
				4x4		7.3L	10030	4269	3125	7394	6000	7500	13660	13660	894	30000
						6.7L	9280	4882	3250	8132	6500	7500	13660	13660	156	39000
	Crew	179.8	60	4x2		7.3L	10360	3883	3183	7066	5200	7500	13660	13660	1222	30000
						6.7L	9650	4407	3359	7766	5600	7500	13660	13660	522	39000
				4x4		7.3L	10020	4209	3189	7398	5600	7500	13660	13660	890	30000
						6.7L	9270	4803	3343	8146	6000	7500	13660	13660	142	39000
		203.4	84	4x2		7.3L	10250	4035	3143	7178	5600	7500	13660	13660	1110	30000
						6.7L	9410	4684	3322	8006	6500	7500	13660	13660	282	39000
				4x4		7.3L	9940	4300	3178	7478	6000	7500	13660	13660	810	30000
						6.7L	9210	4935	3269	8204	6500	7500	13660	13660	84	39000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-550 DRW (18K GVWR)

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[2] (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-550 CC DRW	Reg	145.0	60	4x2	18,000	7.3L	11320	3602	3004	6606	4800	7500	13660	13660	1682	30000
						6.7L	10550	4152	3217	7369	5200	7500	13660	13660	919	39000
				4x4		7.3L	11070	3880	2978	6858	4800	7500	13660	13660	1430	30000
						6.7L	10340	4503	3079	7582	5600	7500	13660	13660	706	39000
		169.0	84	4x2		7.3L	11310	3722	2901	6623	5200	7500	13660	13660	1665	30000
						6.7L	10590	4317	3013	7330	6000	7500	13660	13660	958	39000
				4x4		7.3L	10930	4020	2976	6996	5600	7500	13660	13660	1292	30000
						6.7L	10230	4623	3063	7686	6000	7500	13660	13660	602	39000
		193.0	108	4x2		7.3L	11160	3808	2963	6771	6000	7500	13660	13660	1517	30000
						6.7L	10430	4433	3055	7488	6500	7500	13660	13660	800	39000
				4x4		7.3L	10740	4151	3034	7185	6500	7500	13660	13660	1103	30000
						6.7L	9990	4761	3164	7925	7000	7500	13660	13660	363	39000
		205.0	120	4x2		7.3L	11020	3913	2996	6909	6000	7500	13660	13660	1379	30000
						6.7L	10300	4515	3105	7620	6500	7500	13660	13660	668	39000
				4x4		7.3L	10700	4165	3054	7219	6500	7500	13660	13660	1069	30000
						6.7L	9960	4834	3118	7952	7000	7500	13660	13660	336	39000
	Super	167.5	60	4x2		7.3L	10930	3850	3146	6996	5200	7500	13660	13660	1292	30000
				4x4		7.3L	10620	4121	3177	7298	5600	7500	13660	13660	990	30000
						6.7L	9920	4731	3269	8000	6000	7500	13660	13660	288	39000
		191.5	84	4x2												
						6.7L	10110	4585	3221	7806	6500	7500	13660	13660	482	39000
				4x4		7.3L	10530	4269	3125	7394	6000	7500	13660	13660	894	30000
						6.7L	9780	4882	3250	8132	6500	7500	13660	13660	156	39000
	Crew	179.8	60	4x2		7.3L	10860	3883	3183	7066	5200	7500	13660	13660	1222	30000
						6.7L	10150	4407	3359	7766	5600	7500	13660	13660	522	39000
				4x4		7.3L	10520	4209	3189	7398	5600	7500	13660	13660	890	30000
						6.7L	9770	4803	3343	8146	6000	7500	13660	13660	142	39000
		203.4	84	4x2		7.3L	10750	4035	3143	7178	5600	7500	13660	13660	1110	30000
						6.7L	9910	4684	3322	8006	6500	7500	13660	13660	282	39000
				4x4		7.3L	10440	4300	3178	7478	6000	7500	13660	13660	810	30000
						6.7L	9710	4935	3269	8204	6500	7500	13660	13660	84	39000

1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-550 DRW (19K, 19.5K GVWR)

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[2] (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-550 CC DRW	Reg	145.0	60	4x2	19,000	7.3L	12270	3626	3035	6661	5600	7500	13660	13660	1627	30000
				4x4		7.3L	12010	3902	3018	6920	5600	7500	13660	13660	1368	30000
	Reg	145.0	60	4x2	19,500	6.7L	12050	4183	3186	7369	5200	7500	14706	14706	919	43000
				4x4		6.7L	11870	4445	3105	7550	5600	7500	14706	14706	738	43000
		169.0	84	4x2		7.3L	12700	3666	3060	6726	5600	7500	14706	14706	1562	30000
						6.7L	11950	4319	3149	7468	6000	7500	14706	14706	820	43000
				4x4		7.3L	12340	4040	3043	7083	5600	7500	14706	14706	1205	30000
						6.7L	11660	4608	3151	7759	6500	7500	14706	14706	529	43000
		193.0	108	4x2		7.3L	12530	3815	3084	6899	6000	7500	14706	14706	1389	30000
						6.7L	11790	4470	3159	7629	6500	7500	14706	14706	659	43000
				4x4		7.3L	12190	4159	3072	7231	6500	7500	14706	14706	1057	30000
						6.7L	11480	4755	3179	7934	7000	7500	14706	14706	354	43000
		205.0	120	4x2		7.3L	12490	3904	3030	6934	6000	7500	14706	14706	1354	30000
						6.7L	11770	4508	3144	7652	7000	7500	14706	14706	636	43000
				4x4		7.3L	12090	4232	3098	7330	6500	7500	14706	14706	958	30000
						6.7L	11410	4859	3144	8003	7000	7500	14706	14706	285	43000
	Super	167.5	60	4x2		7.3L	12440	3864	3123	6987	5200	7500	14706	14706	1301	30000
				4x4		7.3L	12060	4126	3233	7359	5600	7500	14706	14706	929	30000
						6.7L	11340	4726	3349	8075	6000	7500	14706	14706	213	43000
		191.5	84	4x2												
						6.7L	11530	4577	3313	7890	6500	7500	14706	14706	398	43000
				4x4		7.3L	11950	4272	3199	7471	6000	7500	14706	14706	817	30000
						6.7L	11230	4869	3312	8181	6500	7500	14706	14706	107	43000
	Crew	179.8	60	4x2		7.3L	12280	3885	3262	7147	5200	7500	14706	14706	1141	30000
						6.7L	11530	4536	3346	7882	6000	7500	14706	14706	406	43000
				4x4		7.3L	11960	4199	3260	7459	5600	7500	14706	14706	829	30000
						6.7L	11230	4796	3390	8186	6000	7500	14706	14706	102	43000
		203.4	84	4x2		7.3L	12190	4028	3202	7230	6000	7500	14706	14706	1058	30000
						6.7L	11450	4640	3326	7966	6500	7500	14706	14706	322	43000
				4x4		7.3L	11830	4343	3243	7586	6000	7500	14706	14706	702	30000
						6.7L	11120	4933	3355	8288	6500	7500	14706	14706	0	43000

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FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB MODEL LINEUP - F-600 DRW

	CAB	WB (in)	CA	DRIVE	GVWR (lb.)	ENGINE	MAX ADVERTISED PAYLOAD[1] (lb.)	BASE CURB WEIGHT (lb.)			GAWR[2] (lb.)				MAX TOTAL ARC (lb.)	MAX GCWR (lb.)
											MIN	MAX	MIN	MAX		
								FRONT	REAR	TOTAL	FRONT	FRONT	REAR	REAR		
F-600 CC DRW	Reg	145.0	60	4x2	22,000	7.3L	15140	3683	3103	6786	7500	7500	15500	15500	1502	31500
						6.7L	14400	4220	3296	7516	7500	7500	15500	15500	772	43500
		169.0	84			7.3L	14980	3839	3103	6942	7500	7500	15500	15500	1346	31500
						6.7L	14290	4422	3211	7633	7500	7500	15500	15500	655	43500
		193.0	108			7.3L	14990	3939	3000	6939	7500	7500	15500	15500	1349	31500
						6.7L	14280	4531	3107	7638	7500	7500	15500	15500	650	43500
		205.0	120			7.3L	14810	4071	3046	7117	7500	7500	15500	15500	1171	31500
						6.7L	14050	4583	3288	7871	7500	7500	15500	15500	417	43500
		145.0	60	4x4		7.3L	14800	3976	3152	7128	7500	7500	15500	15500	1160	31500
						6.7L	14130	4574	3212	7786	7500	7500	15500	15500	502	43500
		169.0	84			7.3L	14690	4112	3118	7230	7500	7500	15500	15500	1058	31500
						6.7L	14020	4696	3200	7896	7500	7500	15500	15500	392	43500
		193.0	108			7.3L	14650	4234	3037	7271	7500	7500	15500	15500	1017	31500
						6.7L	13880	4797	3242	8039	7500	7500	15500	15500	249	43500
		205.0	120			7.3L	14500	4257	3159	7416	7500	7500	15500	15500	872	31500
						6.7L	13850	4943	3121	8064	7500	7500	15500	15500	224	43500

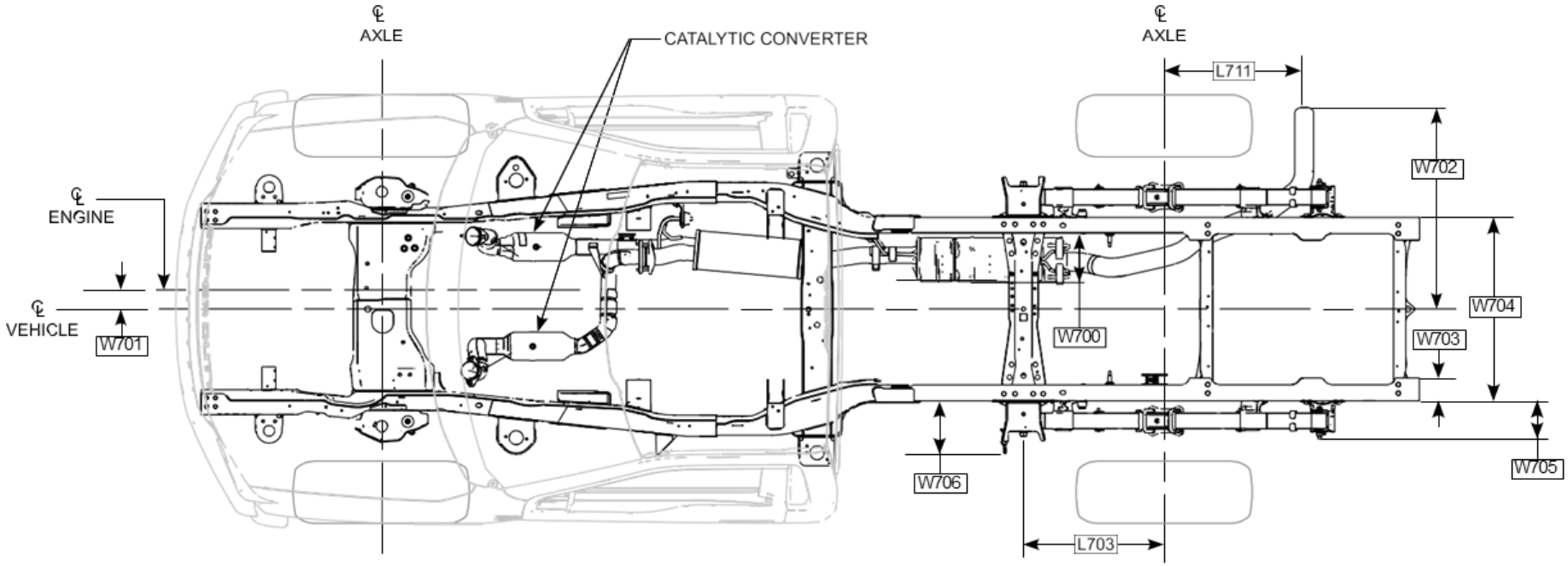
1) Load rating represents maximum allowable weight of people, cargo and body equipment and is reduced by optional equipment weight.
2) Gross Axle Weight Rating (GAWR) is determined by the rated capacity of the minimum component of the axle system (axle, computer-selected springs, wheels, tires) of a specific vehicle. Front and Rear GAWRs will, in all cases, sum to a number equal to or greater than the GVWR for a vehicle. Maximum loaded vehicle (including passengers, equipment and payload) cannot exceed the GVW rating or GAWR (front or rear).

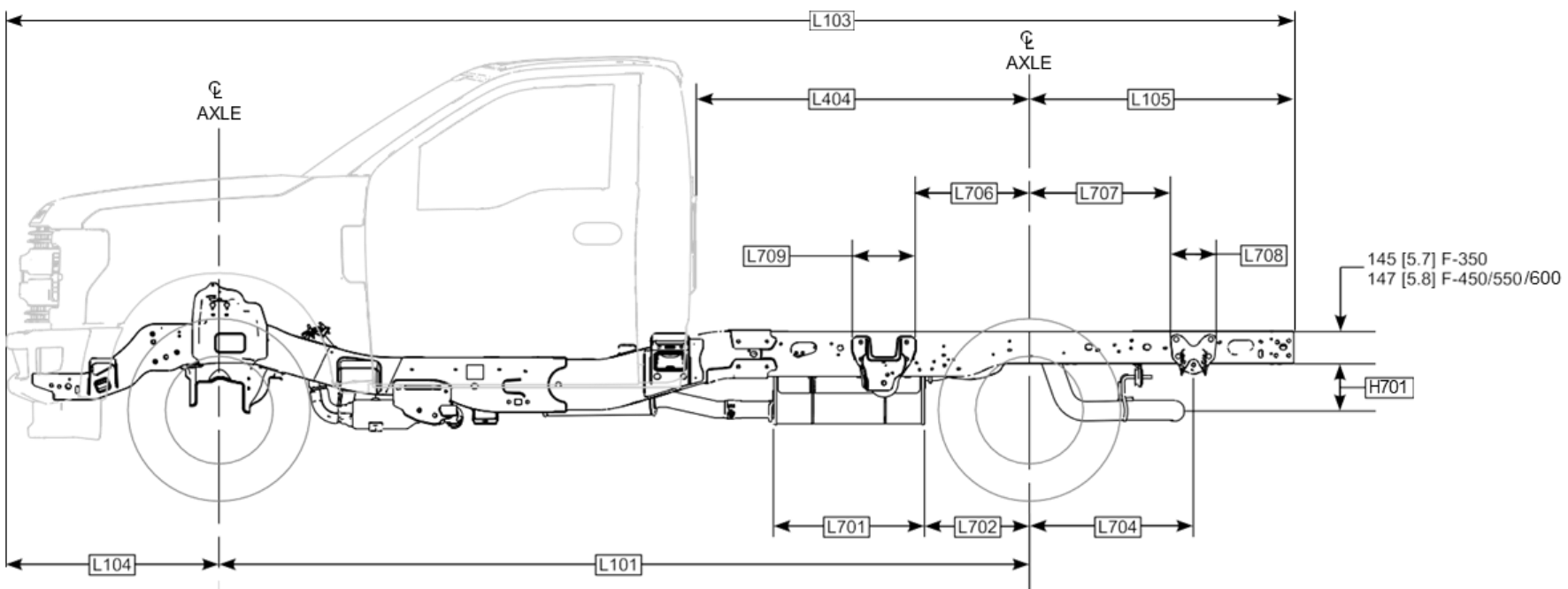
FRONT SPRING/GAWR ON CHASSIS CAB MODELS IS ASSIGNED OR SPECIFICALLY SELECTED.

NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY

CHASSIS CAB DIMENSIONAL DATA - REGULAR CAB





NOTE- [ ] DIMENSION ARE INCHES

Ford PRO

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB DIMENSIONAL DATA - REGULAR CAB (CONT'D)

CODE	DESCRIPTION	F350 SRW / DRW mm [inches]	F350 DRW mm [inches]	F450 DRW mm [inches]						F550 DRW mm [inches]						F600 DRW mm [inches]					
		4x2 and 4x4		4x2 and 4x4						4x2 and 4x4						4x2 and 4x4					
H701	C/L OF OUTLET PIPE TO BOTTOM OF FRAME -- ALL ENGINES	GAS 218 [8.6]		218 [8.6]						GAS 218 [8.6]						218 [8.6]					
L101	WHEELBASE	3691 [**145.3**]	4301 [**169.3**]	3691 [**145.3**]		4301 [**169.3**]		4911 [**193.3**]	5215 [**205.3**]	3691 [**145.3**]		4301 [**169.3**]		4911 [**193.3**]	5215 [**205.3**]	3691 [**145.3**]		4301 [**169.3**]		4911 [**193.3**]	5215 [**205.3**]
L103	OVERALL LENGTH	5861 [230.8]	6471 [254.8]	5861 [230.8]	6933 [273.0]	6471 [254.8] 7081 [278.8]		7081 [278.8]	7385 [290.8]	5861 [230.8]	* 6933 [273.0]	6471 [254.8]	** 7294 [287.2]	7081 [278.8]	7385 [290.8]	5861 [230.8]	* 6933 [273.0]	6471 [254.8]	** 7294 [287.2]	7081 [278.8]	7385 [290.8]
L104	FRONT OVERHANG	972 [38.3]		972 [38.3]						972 [38.3]						972 [38.3]					
L105	REAR OVERHANG	1198 [47.2]		1198 [47.2]	* 2270 [89.4]	1199 [47.2]	**2021 [79.6]		1199 [47.2]	1198 [47.2]	* 2270 [89.4]	1198 [47.2]	** 2021 [79.6]	1198 [47.2]		1198 [47.2]	* 2270 [89.4]	1198 [47.2]	** 2021 [79.6]	1198 [47.2]	
L404	BACK OF CAB TO C/L OF REAR AXLE (CA)	1524 [**60**]	2134 [**84**]	1524 [**60**]		2134 [**84**]		2743 [**108**]	3048 [**120**]	1524 [**60**]		2134 [**84**]		2743 [**108**]	3048 [**120**]	1524 [**60**]		2134 [**84**]		2743 [**108**]	3048 [**120**]
L701	MUFFLER LENGTH (GAS)	698 [27.5]		698 [27.5]						698 [27.5]						698 [27.5]					
L702	MUFFLER REAR TO C/L REAR AXLE (GAS)	472 [18.6]		472 [18.6]						472 [18.6]						472 [18.6]					
L703	REAR SPRING FRONT EYE TO C/L REAR AXLE	661 [26.0]		661 [26.0]						661 [26]						661 [26]					
L704	C/L RR AXLE TO C/L RR SPRING SHACKLE BRKT	748 [29.5]		748 [29.5]						748 [29.5]						748 [29.5]					
L706	RR OF FRT SPRING BRKT TO C/L RR AXLE	534 [21.0]		535 [21.1]						535 [21.1]						535 [21.1]					
L707	C/L RR AXLE TO FRT OF RR SPRING SHACKLE BRKT	639 [25.2]		639 [25.2]						639 [25.2]						639 [25.2]					
L708	REAR SPRING SHACKLE BRACKET WIDTH	225 [8.9]		225 [8.9]						225 [8.9]						225 [8.9]					
L709	FRONT SPRING SHACKLE BRACKET WIDTH	258 [10.2]		254 [10.0]						254 [10.0]						254 [10.0]					
L711	C/L OF RR AXLE TO C/L OF EXHAUST PIPE (GAS)	776 [30.6]		776 [30.6]						776 [30.6]						776 [30.6]					
	C/L OF RR AXLE TO C/L OF EXHAUST PIPE (DIESEL)	867 [34.1]		867 [34.1]						867 [34.1]						867 [34.1]					
W700	MUFFLER CROSS SECTION (GAS)	218 [8.6]		218 [8.6]						218 [8.6]						218 [8.6]					
W701	DISTANCE BETWEEN C/L ENGINE / VEHICLE	45 [1.8]		45 [1.8]						45 [1.8]						45 [1.8]					
W702	END OF TAILPIPE TO C/L VEHICLE (GAS)	935 [36.8]		935 [36.8]						935 [36.8]						935 [36.8]					
	END OF TAILPIPE TO C/L VEHICLE (DIESEL)	917 [36.1]		917 [36.1]						917 [36.1]						917 [36.1]					
W703	FRAME RAIL WIDTH	107 [4.2]		108 [4.2]						108 [4.2]						108 [4.2]					
W704	REAR FRAME RAIL WIDTH	868 [34.2]		868 [34.2]						868 [34.2]						868 [34.2]					
W705	FRAME TO OUTSIDE OF RR SPRING SHACKLE BRKT	145 [5.7]		146 [5.7]						146 [5.7]						146 [5.7]					
W706	FRAME TO OUTSIDE OF RR SPRING HANGER BRKT	153 [6]		153 [6.0]						153 [6.0]						153 [6.0]					

* Regular Cab 60" CA with 42.2 AF Frame Extension
** Regular Cab 84" CA with 32.4"AF Frame Extension.

NOTE- [ ] DIMENSION ARE INCHES

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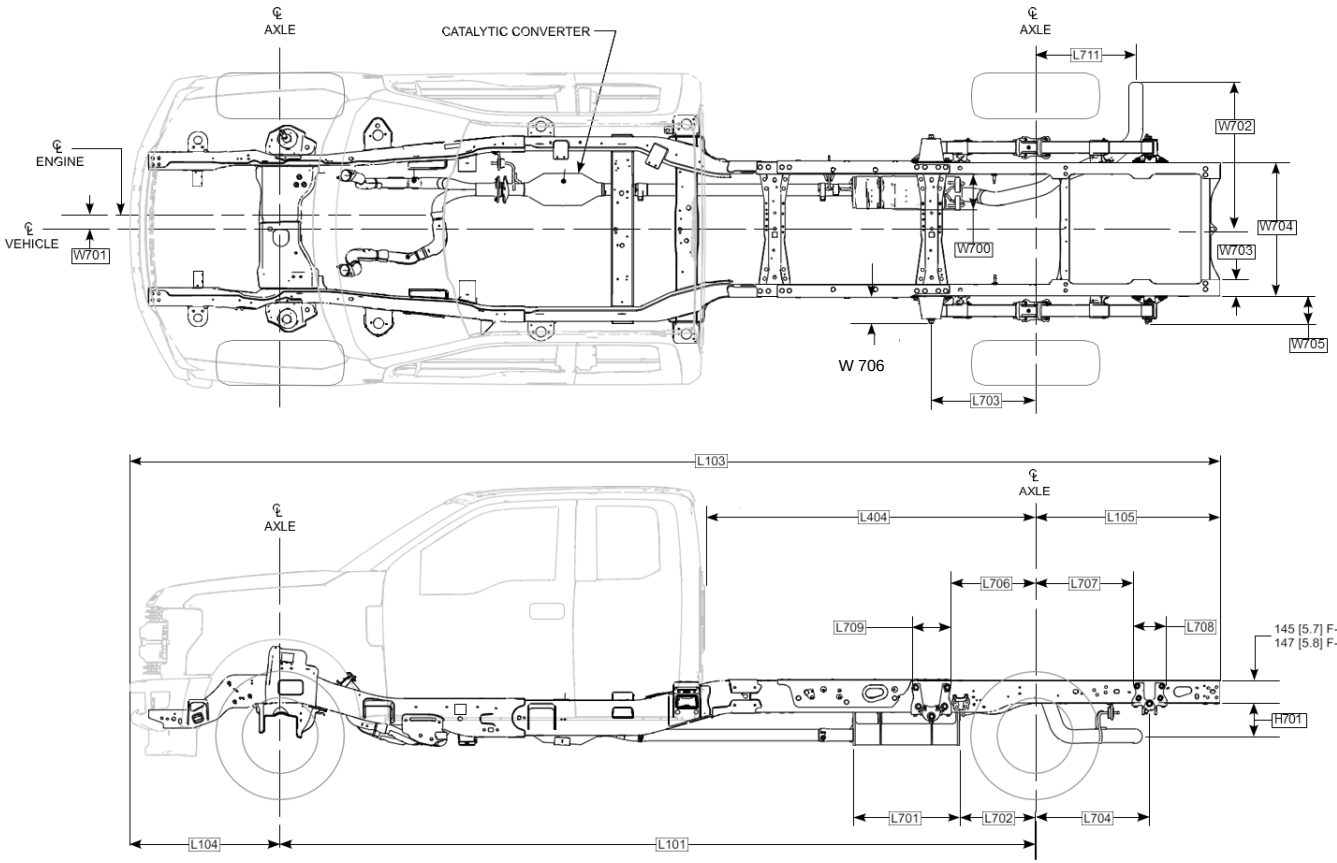
Body Builders Layout Book

SUPER DUTY

CHASSIS CAB DIMENSIONAL DATA - SUPER CAB



CODE	DESCRIPTION	F350 SRW / DRW mm [inches] 4x2 / 4x4	F-450 DRW mm [inches] 4x2 / 4x4		F-550 DRW mm [inches] 4x2 / 4x5	
H701	C/L OF OUTLET PIPE TO BOTTOM OF FRAME -- ALL ENGINES	GAS 218 [8.6]	GAS 218 [8.6]		GAS 218 [8.6]	
L101	WHEELBASE	4265 [167.9]	4265 [167.9]	4875 [191.9]	4265 [167.9]	4875 [191.9]
L103	OVERALL LENGTH	6435 [253.3]	6435 [253.4]	7045 [277.4]	6435 [253.4]	7045 [277.4]
L104	FRONT OVERHANG	972 [38.3]	972 [38.3]		972 [38.3]	
L105	REAR OVERHANG	1198 [47.2]	1198 [47.2]		1198 [47.2]	
L404	BACK OF CAB TO C/L OF REAR AXLE (CA)	1524 [60.0]	1524 [60.0]	2134 [84.0]	1524 [60.0]	2134 [84.0]
L701	MUFFLER LENGTH (GAS)	698 [27.5]	698 [27.5]		698 [27.5]	
L702	MUFFLER REAR TO C/L REAR AXLE (GAS)	472 [18.6]	472 [18.6]		472 [18.6]	
L703	REAR SPRING FRONT EYE TO C/L REAR AXLE	661 [26]	661 [26]		661 [26]	
L704	C/L RR AXLE TO C/L RR SPRING SHACKLE BRKT	748 [29.5]	748 [29.5]		748 [29.5]	
L706	RR OF FRT SPRING BRKT TO C/L RR AXLE	535 [21.1]	535 [21.1]		535 [21.1]	
L707	C/L RR AXLE TO FRT OF RR SPRING SHACKLE BRKT	639 [25.2]	639 [25.2]		639 [25.2]	
L708	REAR SPRING SHACKLE BRACKET WIDTH	225 [8.9]	225 [8.9]		225 [8.9]	
L709	FRONT SPRING SHACKLE BRACKET WIDTH	258 [10.2]	254 [10.0]		254 [10.0]	
L711	C/L OF RR AXLE TO C/L OF EXHAUST PIPE (GAS)	776 [30.6]	776 [30.6]		776 [30.6]	
	C/L OF RR AXLE TO C/L OF EXHAUST PIPE (DIESEL)					
W700	MUFFLER CROSS SECTION (GAS)	218 [8.6]	218 [8.6]		218 [8.6]	
W701	DISTANCE BETWEEN C/L ENGINE / VEHICLE	45 [1.8]	45 [1.8]		45 [1.8]	
W702	END OF TAILPIPE TO C/L VEHICLE (GAS)	935 [36.8]	935 [36.8]		935 [36.8]	
	END OF TAILPIPE TO C/L VEHICLE (DIESEL)					
W703	FRAME RAIL WIDTH	107 [4.2]	108 [4.2]		108 [4.2]	
W704	REAR FRAME RAIL WIDTH	866 [34.1]	868 [34.2]		868 [34.2]	
W705	FRAME TO OUTSIDE OF RR SPRING SHACKLE BRKT	145 [5.7]	146 [5.7]		146 [5.7]	
W706	FRAME TO OUTSIDE OF RR SPRING HANGER BRKT	153 [6]	153 [6]		153 [6]	

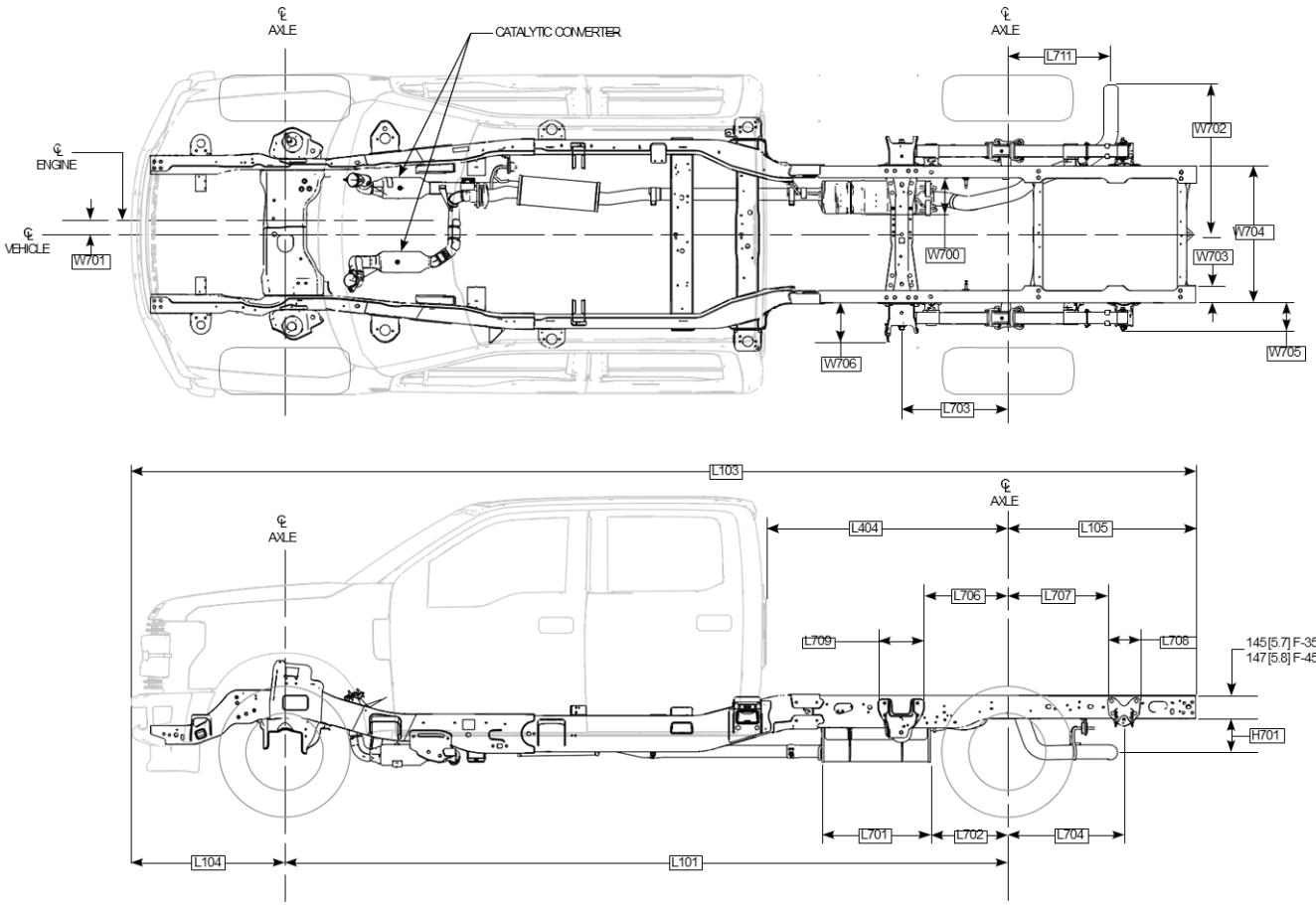
NOTE- [ ] DIMENSION ARE INCHES

Ford PRO

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB DIMENSIONAL DATA - CREW CAB

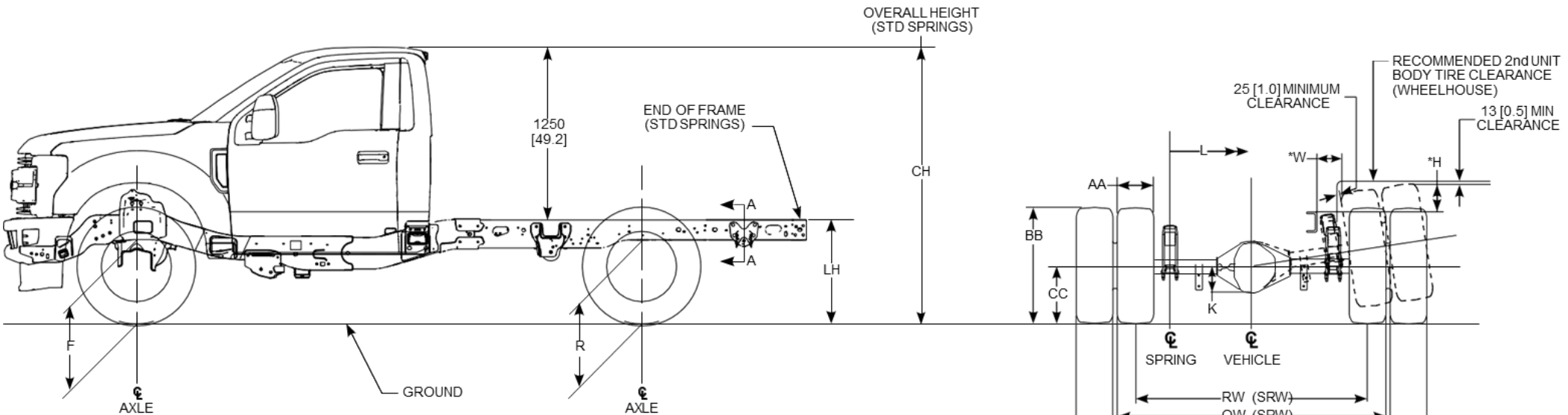


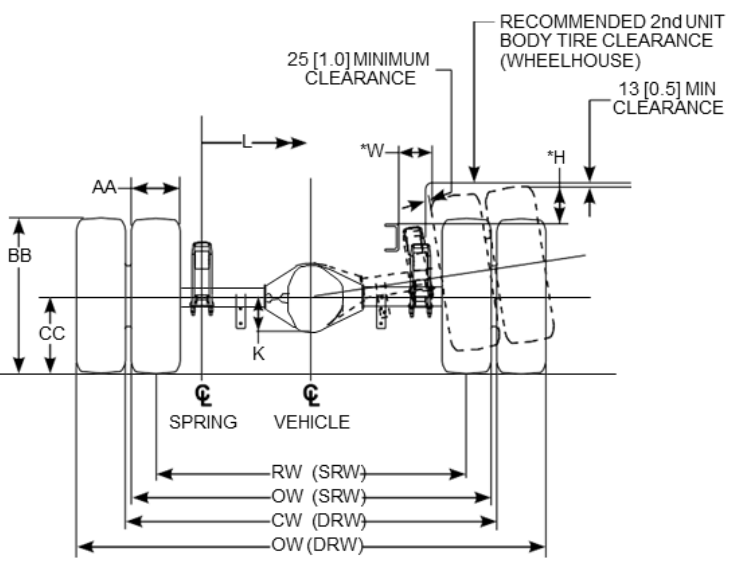
CODE	DESCRIPTION	F350 SRW / DRW	F-450 DRW		F-550 DRW	
		mm [inches]	mm [inches]		mm [inches]	
		4x2 / 4x4	4x2 / 4x4		4x2 / 4x5	
H701	C/L OF OUTLET PIPE TO BOTTOM OF FRAME -- ALL ENGINES	GAS 218 [8.6]	GAS 218 [8.6]		GAS 218 [8.6]	
L101	WHEELBASE	4565 [179.8]	4565 [179.8]	5175 [203.7]	4565 [167.9]	5175 [191.9]
L103	OVERALL LENGTH	6735 [265.2]	6735 [265.2]	7345 [289.2]	6735 [253.4]	7345 [277.4]
L104	FRONT OVERHANG	972 [38.3]	972 [38.3]		972 [38.3]	
L105	REAR OVERHANG	1198 [47.2]	1198 [47.2]		1198 [47.2]	
L404	BACK OF CAB TO C/L OF REAR AXLE (CA)	1524 [60.0]	1524 [60.0]	2134 [84.0]	1524 [60.0]	2134 [84.0]
L701	MUFFLER LENGTH (GAS)	698 [27.5]	698 [27.5]		698 [27.5]	
L702	MUFFLER REAR TO C/L REAR AXLE (GAS)	472 [18.6]	472 [18.6]		472 [18.6]	
L703	REAR SPRING FRONT EYE TO C/L REAR AXLE	661 [26]	661 [26]		661 [26]	
L704	C/L RR AXLE TO C/L RR SPRING SHACKLE BRKT	748 [29.5]	748 [29.5]		748 [29.5]	
L706	RR OF FRT SPRING BRKT TO C/L RR AXLE	534 [21.0]	535 [21.1]		535 [21.1]	
L707	C/L RR AXLE TO FRT OF RR SPRING SHACKLE BRKT	639 [25.2]	639 [25.2]		639 [25.2]	
L708	REAR SPRING SHACKLE BRACKET WIDTH	225 [8.9]	225 [8.9]		225 [8.9]	
L709	FRONT SPRING SHACKLE BRACKET WIDTH	258 [10.2]	254 [10.0]		254 [10.0]	
L711	C/L OF RR AXLE TO C/L OF EXHAUST PIPE (GAS)	776 [30.6]	776 [30.6]		776 [30.6]	
	C/L OF RR AXLE TO C/L OF EXHAUST PIPE (DIESEL)					
W700	MUFFLER CROSS SECTION (GAS)	218 [8.6]	218 [8.6]		218 [8.6]	
W701	DISTANCE BETWEEN C/L ENGINE / VEHICLE	45 [1.8]	45 [1.8]		45 [1.8]	
W702	END OF TAILPIPE TO C/L VEHICLE (GAS)	935 [36.8]	935 [36.8]		935 [36.8]	
	END OF TAILPIPE TO C/L VEHICLE (DIESEL)					
W703	FRAME RAIL WIDTH	107 [4.2]	108 [4.2]		108 [4.2]	
W704	REAR FRAME RAIL WIDTH	866 [34.1]	868 [34.2]		868 [34.2]	
W705	FRAME TO OUTSIDE OF RR SPRING SHACKLE BRKT	145 [5.7]	146 [5.7]		146 [5.7]	
W706	FRAME TO OUTSIDE OF RR SPRING HANGER BRKT	153 [6]	153 [6]		153 [6]	

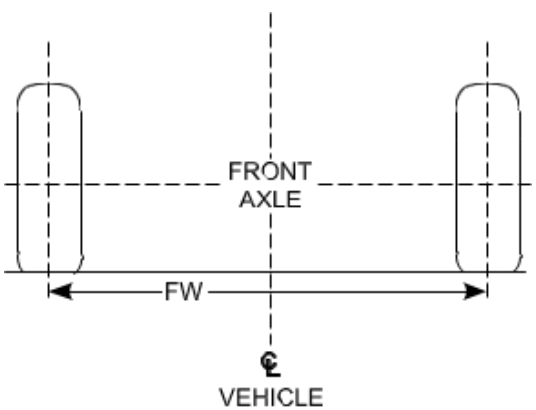
NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY

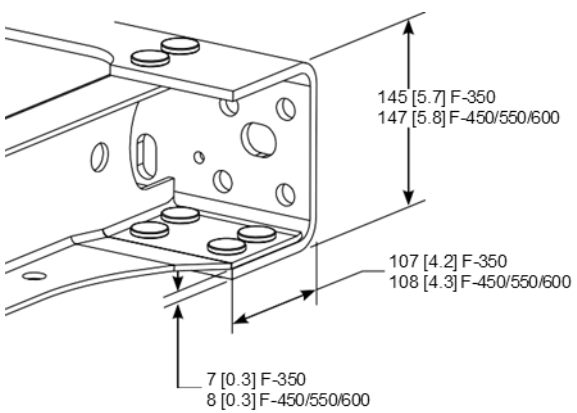
CHASSIS CAB AXLE / TIRE / VEHICLE HEIGHT DATA - REGULAR CAB



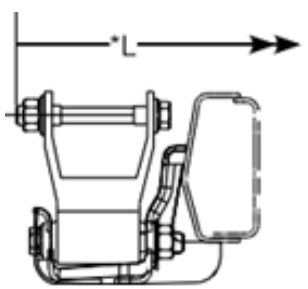




FRONT TREAD WIDTH



END OF FRAME



SECTION A
ENLARGED

NOTES:

- F AND R VEHICLE HEIGHT DIMENSIONS ARE FROM GROUND TO BOTTOM OF FRAME.
- LH IS FROM GROUND TO TOP OF FLOOR RIBS
- *H IS TOP OF FRAME AT CENTER LINE OF REAR AXLE TO TOP OF THE TIRE IN JOUNCE
- *L IS FROM THE OUTSIDE EDGE OF SHACKLE EYEBOLT
- *W IS OUTSIDE OF FRAME TO TOP OF TIRE IN JOUNCE

NOTE- [ ] DIMENSION ARE INCHES

Ford PRO

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB AXLE / TIRE / VEHICLE HEIGHT DATA - REGULAR CAB (CONT)

MODEL	Standard GVWR (pounds)	WB (inches)	Base Tire	Units	CC (SLR)	Tire Diameter	F Height at Front Axle (1)		R Height at Rear Axle (1)		LH (1)		CH (1)		K	L	L*	AA (5)	BB	FW (4)	RW	OW	CW (6)	*H	*W
							Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)											
F-350 Regular Cab 4x2	9,800 SRW	145.3	LT245/75R17E	mm	375	807	545	517	649	538	830	692	2009	1937	180 (C)	1056	1223	265	779	1735	1729	1994	---	219	275
				inches	14.8	31.8	21.5	20.3	25.5	21.2	32.7	27.2	79.1	76.3	7.1	41.6	48.1	10.4	31	68.3	68.1	78.5	---	8.6	11
	14,000 DRW	145.3		mm	375	807	549	516	655	547	837	704	2013	1942	183	1056	1223	254	779	1755	---	2342	1805	219	189
				inches	14.8	31.8	21.6	20.3	25.8	21.5	33	27.7	79.3	76.4	7.2	41.6	48.1	10	31	69.1	---	92.2	71.1	8.6	7.4
		169.3		mm	375	807	560	514	656	547	830	703	2012	1938	183	1056	1223	254	779	1755	---	2342	1805	218	189
				inches	14.8	31.8	22	20.2	25.8	21.5	32.7	27.7	79.2	76.3	7.2	41.6	48.1	10	31	69.1	---	92.2	71.1	8.6	7.4
F-350 Regular Cab 4x4	9,800 SRW	145.3	LT245/75R17E	mm	375	807	627	603	711	601	886	747	2080	2011	180 (C)	1056	1223	265	779	1736	1729	1994	---	167	280
				inches	14.8	31.8	24.7	23.8	28	23.7	34.9	29.4	81.9	79.2	7.1	41.6	48.1	10.4	31	68.3	68.1	78.5	---	6.6	11
	14,000 DRW	145.3		mm	375	807	640	602	714	607	885	755	2088	2014	183	1056	1223	254	779	1756	---	2342	1805	165	193
				inches	14.8	31.8	25.2	23.7	28.1	23.9	34.8	29.7	82.2	79.3	7.2	41.6	48.1	10	31	69.1	---	92.2	71.1	6.5	7.6
		169.3		mm	375	807	647	600	710	602	874	749	2084	2010	183	1056	1223	254	779	1756	---	2342	1805	165	193
				inches	14.8	31.8	25.5	23.6	27.9	23.7	34.4	29.5	82	79.1	7.2	41.6	48.1	10	31	69.1	---	92.2	71.1	6.5	7.6
F-450 Regular Cab 4x2 W/O SPACER (7)	15,000 DRW	145.3	225/70R19.5G	mm	383	814	648	609	725	607	899	755	2098	2018	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15	32	25.5	24	28.5	23.9	35.4	29.7	82.6	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		145.3 (A)		mm	383	814	648	609	725	607	924	757	2098	2018	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15	32	25.5	24	28.5	23.9	36.4	29.8	82.6	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		169.3		mm	383	814	655	608	721	602	888	749	2094	2015	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.8	23.9	28.4	23.7	35	29.5	82.4	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		193.3		mm	383	814	658	607	720	602	884	750	2091	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.9	23.9	28.4	23.7	34.8	29.5	82.3	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		205.3		mm	383	814	658	607	720	602	883	750	2089	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.9	23.9	28.3	23.7	34.8	29.5	82.3	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
F-450 Regular Cab 4x4 W/O SPACER (7)	15,000 DRW	145.3	225/70R19.5G	mm	383	814	639	611	725	607	902	755	2093	2019	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.2	24.1	28.5	23.9	35.5	29.7	82.4	79.5	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		145.3 (A)		mm	383	814	639	611	725	607	929	756	2093	2019	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.2	24.1	28.5	23.9	36.6	29.8	82.4	79.5	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		169.3		mm	383	814	647	610	720	602	889	749	2089	2016	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.5	24	28.3	23.7	35	29.5	82.2	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		193.3		mm	383	814	659	607	720	602	884	750	2092	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.9	23.9	28.3	23.7	34.8	29.5	82.3	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		205.3		mm	383	814	658	607	720	602	883	750	2089	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.9	23.9	28.3	23.7	34.8	29.5	82.3	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4

1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances
2) Height at Base Curb Weight with standard springs.
3) Loaded Height at spring rating with standard springs.
4) FW for F350 DRW with Aluminum rim = 1766mm [69.5in] (4x2) and 1767mm [69.6in] (4x4). FW for F450/F550 DRW with Aluminum rim = 1916mm [75.4in].
5) AA is maximum grown width at maximum tire pressure and load.
6) CW is DRW Rear Track width measured at rim mating flange surface.
7) Low Deflection Spacer Option adds 51 mm (2.0 in) to R (Height at Rear Axle) Value

(A) F450/F550 RC 60CA with 42.2" Aft Axle Frame Extension.
(B) F550 RC 84CA with 32.4" Aft Axle Frame Extension.
(C) K (SRW) = 180mm [7.1in] for 6.7L Diesel, 165mm [6.5in] for 6.8L Gas.

SRW – Single Rear Wheels
DRW – Dual Rear W heels

*H - Top of frame at C/L of rear axle to top of tire in jounce.
*L - From outside edge of shackle eyebolt
*W - Outside of frame to top of tire in jounce.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB AXLE / TIRE / VEHICLE HEIGHT DATA - REGULAR CAB (CONT)

MODEL	Standard GVWR (pounds)	WB (inches)	Base Tire	Units	CC (SLR)	Tire Diameter	F Height at Front Axle (1)		R Height at Rear Axle (1)		LH (1)		CH (1)		K	L	L*	AA (5)	BB	FW (4)	RW	OW	CW (6)	*H	*W
							Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)											
F-550 Regular Cab 4x2 W/O SPACER (7)	17,500 DRW	145.3	225/70R19.5G	mm	383	814	648	609	725	609	900	758	2098	2019	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.5	24	28.6	24	35.4	29.9	82.6	79.5	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		145.3 (A)		mm	383	814	648	609	725	609	925	760	2098	2019	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15	32	25.5	24	28.6	24	36.4	29.9	82.6	79.5	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		169.3		mm	383	814	655	608	721	604	889	752	2094	2016	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.8	23.9	28.4	23.8	35	29.6	82.4	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		193.3		mm	383	814	666	605	721	604	883	753	2096	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	26.2	23.8	28.4	23.8	34.8	29.6	82.5	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		205.3		mm	383	814	665	605	720	604	882	753	2094	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	26.2	23.8	28.4	23.8	34.7	29.6	82.4	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
F-550 Regular Cab 4x4 W/O SPACER (7)	17,500 DRW	145.3	225/70R19.5G	mm	383	814	650	610	725	609	899	758	2099	2019	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.6	24	28.5	24	35.4	29.8	82.6	79.5	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		145.3 (A)		mm	383	814	650	610	725	609	923	760	2099	2019	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.6	24	28.5	24	36.3	29.9	82.6	79.5	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		169.3		mm	383	814	655	605	721	604	888	752	2094	2016	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.8	23.8	28.4	23.8	35	29.6	82.4	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		193.3		mm	383	814	659	607	721	604	884	752	2092	2015	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.9	23.9	28.4	23.8	34.8	29.6	82.4	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4
		205.3		mm	383	814	665	606	720	604	882	752	2094	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	26.2	23.8	28.4	23.8	34.7	29.6	82.4	79.3	7.2	41.6	48.1	9.3	31	74.8	---	94	74	7.6	9.4

1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances
2) Height at Base Curb Weight with standard springs.
3) Loaded Height at spring rating with standard springs.
4) FW for F350 DRW with Aluminum rim = 1766mm [69.5in] (4x2) and 1767mm [69.6in] (4x4). FW for F450/F550 DRW with Aluminum rim = 1916mm [75.4in].
5) AA is maximum grown width at maximum tire pressure and load.
6) CW is DRW Rear Track width measured at rim mating flange surface.
7) Low Deflection Spacer Option adds 51 mm (2.0 in) to R (Height at Rear Axle) Value

(A) F450/F550 RC 60CA with 42.2" Aft Axle Frame Extension.
(B) F550 RC 84CA with 32.4" Aft Axle Frame Extension.
(C) K (SRW) = 180mm [7.1in] for 6.7L Diesel, 165mm [6.5in] for 6.8L Gas.

SRW – Single Rear Wheels
DRW – Dual Rear W heels

*H - Top of frame at C/L of rear axle to top of tire in jounce.
*L - From outside edge of shackle eyebolt
*W - Outside of frame to top of tire in jounce.

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB AXLE / TIRE / VEHICLE HEIGHT DATA - REGULAR CAB (CONT)

MODEL	Standard GVWR (pounds)	WB (inches)	Base Tire	Units	CC (SLR)	Tire Diameter	F Height at Front Axle (1)		R Height at Rear Axle (1)		LH (1)		CH (1)		K	L	L*	AA (5)	BB	FW (4)	RW	OW	CW (6)	*H	*W
							Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)											
F-550 Regular Cab 4x2 W/O SPACER (7)	19,000 (7.3L) 19,500 (6.7L) DRW	145.3	225/70R19.5G	mm	383	814	667	608	730	616	900	767	2110	2022	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	26.3	24	28.8	24.2	35.4	30.2	83.1	79.6	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
	19,500 DRW	169.3		mm	383	814	664	608	709	609	870	759	2093	2018	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	26.1	24	27.9	24	34.3	29.9	82.4	79.5	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
		169.3 (B)		mm	383	814	653	607	709	609	885	761	2087	2018	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.7	23.9	27.9	24	34.8	30	82.2	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
		193.3		mm	383	814	667	607	703	609	860	759	2090	2017	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	26.3	23.9	27.7	24	33.9	29.9	82.3	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
		205.3		mm	383	814	673	606	703	609	858	759	2093	2016	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	26.5	23.8	27.7	24	33.8	29.9	82.4	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
F-550 Regular Cab 4x4 W/O SPACER (7)	19,000 (7.3L) 19,500 (6.7L) DRW	145.3	225/70R19.5G	mm	383	814	658	608	730	616	903	767	2105	2022	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.9	24	28.7	24.2	35.5	30.2	82.9	79.6	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
	19,500 DRW	169.3		mm	383	814	655	608	703	609	865	759	2086	2018	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.8	24	27.7	24	34	29.9	82.1	79.5	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
		169.3 (B)		mm	383	814	653	606	702	609	875	762	2084	2017	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.7	23.8	27.6	24	34.4	30	82.1	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
		193.3		mm	383	814	666	606	703	609	860	759	2089	2016	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	26.2	23.8	27.7	24	33.9	29.9	82.2	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
		205.3		mm	383	814	665	606	702	609	860	759	2087	2016	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	26.2	23.8	27.7	24	33.8	29.9	82.2	79.4	7.2	41.6	48.1	9.3	31	74.8	---	94	74	6.8	9.4
F-600 Regular Cab 4x2 W/O SPACER (7)	22,000 DRW	3691	245/70R19.5G	mm	393	843	665	624	734	628	906	778	2092	2026	183	1056	1223	257	815.1	1893	-	2420	1880	186	252
		145.3		inches	15.5	33.2	26.2	24.6	28.9	24.7	35.7	30.6	82.4	79.8	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
		4300 (B)		mm	393	843	679	622	716	623	875	772	2087	2021	183	1056	1223	257	815	1893	-	2420	1880	186	252
		169.3 (B)		inches	15.5	33.2	26.7	24.5	28.2	24.5	34.4	30.4	82.2	79.6	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
		4300		mm	393	843	667	621	715	623	888	774	2079	2021	183	1056	1223	257	815	1893	-	2420	1880	186	252
		169.3		inches	15.5	33.2	26.3	24.4	28.1	24.5	35	30.5	81.9	79.5	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
		4910		mm	393	843	689	619	716	623	863	772	2091	2018	183	1056	1223	257	815	1893	-	2420	1880	186	252
		193.3		inches	15.5	33.2	27.1	24.4	28.2	24.5	34	30.4	82.3	79.4	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
		5215		mm	393	843	687	619	716	623	871	772	2088	2017	183	1056	1223	257	815	1893	-	2420	1880	186	252
		205.3		inches	15.5	33.2	27	24.4	28.2	24.5	34.3	30.4	82.2	79.4	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
F-600 Regular Cab 4x4 W/O SPACER (7)	22,000 DRW	3691	245/70R19.5G	mm	393	843	665	623	734	628	906	778	2092	2025	183	1056	1223	257	815	1893	-	2420	1880	186	252
		145.3		inches	15.5	33.2	26.2	24.5	28.9	24.7	35.7	30.6	82.4	79.7	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
		4300 (B)		mm	393	843	677	621	716	623	875	772	2086	2020	183	1056	1223	257	815	1893	-	2420	1880	186	252
		169.3 (B)		inches	15.5	33.2	26.7	24.4	28.2	24.5	34.4	30.4	82.1	79.5	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
		4300		mm	393	843	667	619	715	623	888	775	2079	2019	183	1056	1223	257	815	1893	-	2420	1880	186	252
		169.3		inches	15.5	33.2	26.3	24.4	28.1	24.5	35	30.5	81.9	79.5	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
		4910		mm	393	843	681	619	716	623	872	772	2085	2018	183	1056	1223	257	815	1893	-	2420	1880	186	252
		193.3		inches	15.5	33.2	26.8	24.4	28.2	24.5	34.3	30.4	82.1	79.4	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9
		5215		mm	393	843	679	619	715	623	872	772	2083	2017	183	1056	1223	257	815	1893	-	2420	1880	186	252
		205.3		inches	15.5	33.2	26.7	24.4	28.1	24.5	34.3	30.4	82	79.4	7.2	41.6	48.1	10.1	32.1	74.5	-	95.3	74	7.3	9.9

1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances
2) Height at Base Curb Weight with standard springs.
3) Loaded Height at spring rating with standard springs.
4) FW for F350 DRW with Aluminum rim = 1766mm [69.5in] (4x2) and 1767mm [69.6in] (4x4). FW for F450/F550 DRW with Aluminum rim = 1916mm [75.4in].
5) AA is maximum grown width at maximum tire pressure and load.
6) CW is DRW Rear Track width measured at rim mating flange surface.
7) Low Deflection Spacer Option adds 51 mm (2.0 in) to R (Height at Rear Axle) Value

(A) F450/F550 RC 60CA with 42.2" Aft Axle Frame Extension.
(B) F550 RC 84CA with 32.4" Aft Axle Frame Extension.
(C) K (SRW) = 180mm [7.1in] for 6.7L Diesel, 165mm [6.5in] for 6.8L Gas.

SRW – Single Rear Wheels
DRW – Dual Rear W heels

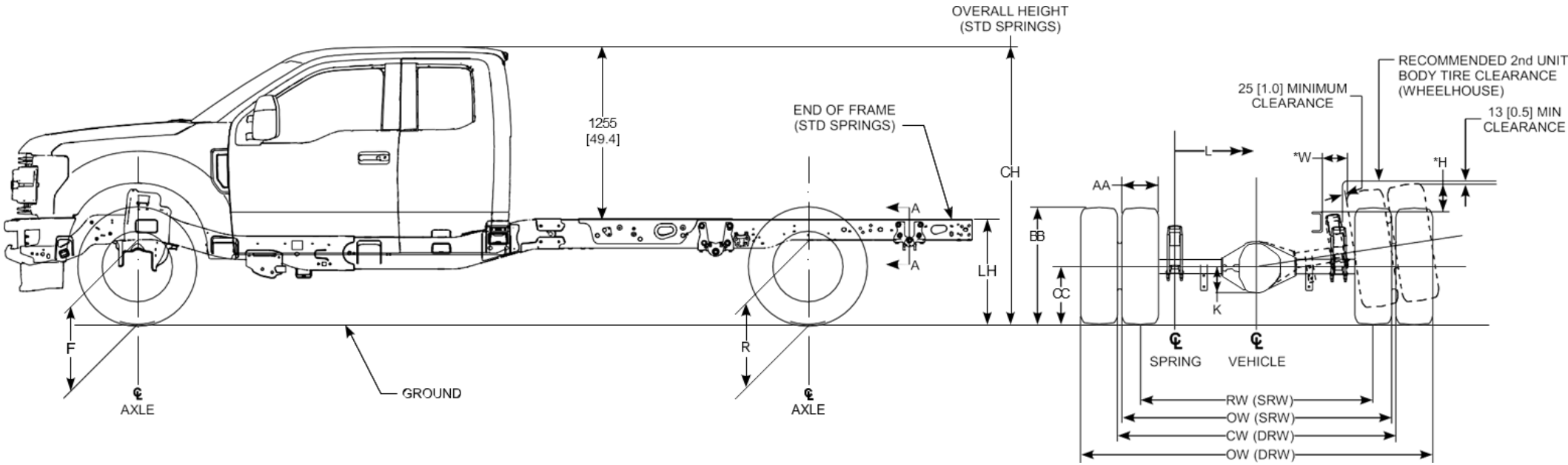
*H - Top of frame at C/L of rear axle to top of tire in jounce.
*L - From outside edge of shackle eyebolt
*W - Outside of frame to top of tire in jounce.

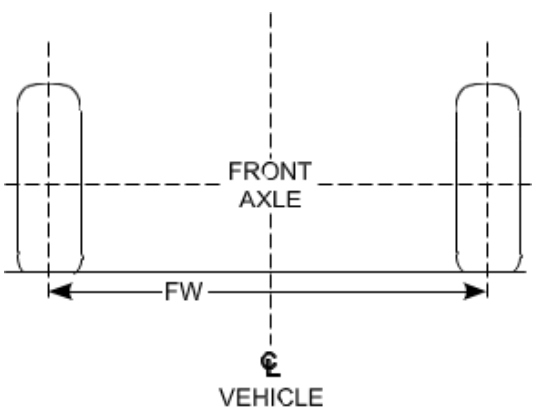
https://www.fordpro.com/en-us/upfit/publications/

NOTE- [ ] DIMENSION ARE INCHES

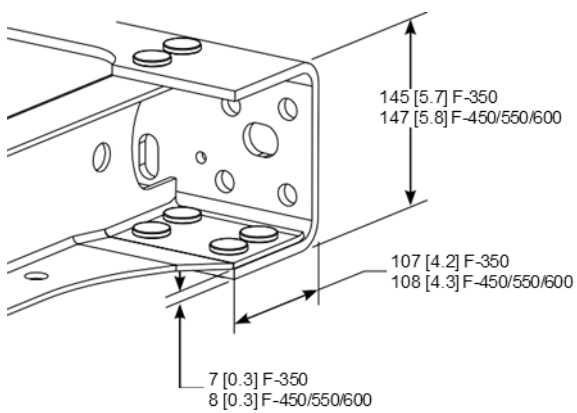
SUPER DUTY

CHASSIS CAB AXLE / TIRE / VEHICLE HEIGHT DATA – SUPER CAB

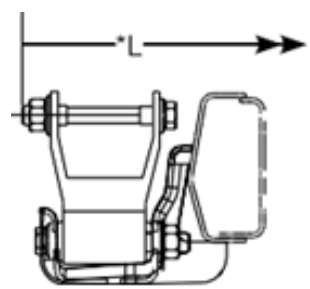




FRONT TREAD WIDTH



END OF FRAME



SECTION A
ENLARGED

NOTES:

- F AND R VEHICLE HEIGHT DIMENSIONS ARE FROM GROUND TO BOTTOM OF FRAME.
- LH IS FROM GROUND TO TOP OF FLOOR RIBS
- *H IS TOP OF FRAME AT CENTER LINE OF REAR AXLE TO TOP OF THE TIRE IN JOUNCE
- *L IS FROM THE OUTSIDE EDGE OF SHACKLE EYEBOLT
- *W IS OUTSIDE OF FRAME TO TOP OF TIRE IN JOUNCE

NOTE- [ ] DIMENSION ARE INCHES

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB AXLE / TIRE / VEHICLE HEIGHT DATA – SUPER CAB (CONT)

MODEL	Standard GVWR (pounds)	WB (inches)	Base Tire	Units	CC (SLR)	Tire Diameter	F Height at Front Axle (1) Base Curb (2)	F Height at Front Axle (1) Loaded (3)	R Height at Rear Axle (1) Base Curb (2)	R Height at Rear Axle (1) Loaded (3)	LH (1) Base Curb (2)	LH (1) Loaded (3)	CH (1) Base Curb (2)	CH (1) Loaded (3)	K	L	L*	AA (5)	BB	FW (4)	RW	OW	CW (6)	*H	*W
F-350 Super Cab 4x2	9800 SRW	167.9	LT245/75R17E	mm	375	807	547	515	647	538	821	691	2014	1937	180 (C)	1056	1223	265	779	1735	1729	1994	---	219	275
				inches	14.8	31.8	21.5	20.3	25.5	21.2	32.3	27.2	79.3	76.3	7.1	41.6	48.1	10.4	30.7	68.3	68.1	78.5	---	8.6	10.8
	14,000 DRW	167.9		mm	375	807	556	515	653	547	827	703	2021	1942	183	1056	1223	254	779	1755	---	2342	1805	219	189
				inches	14.8	31.8	21.9	20.3	25.7	21.5	32.6	27.7	79.6	76.5	7.2	41.6	48.1	10	30.7	69.1	---	92.2	71.1	8.6	7.4
F-350 Super Cab 4x4	9800 SRW	167.9		mm	375	807	632	602	703	596	870	741	2082	2007	180 (C)	1056	1223	265	779	1735	1729	1994	---	167	280
				inches	14.8	31.8	24.9	23.7	27.7	23.5	34.2	29.2	82	79	7.1	41.6	48.1	10.4	30.7	68.3	68.1	78.5	---	6.6	11
	14,000 DRW	167.9		mm	375	807	642	600	708	602	873	749	2089	2009	183	1056	1223	254	779	1755	---	2342	1805	165	193
				inches	14.8	31.8	25.3	23.6	27.9	23.7	34.4	29.5	82.2	79.1	7.2	41.6	48.1	10	30.7	69.1	---	92.2	71.1	6.5	7.6
F-450 Super Cab 4x2 w/o Spacer (7)	15,000 DRW	167.9	225/70R19.5G	mm	383	814	642	609	719	602	890	749	2096	2014	183	1056	1223	235	779	1901	---	2386	1880	194	238
				inches	15	32	25.3	24	28.3	23.7	35	29.5	82.5	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
		191.9		mm	383	814	655	607	719	602	883	750	2096	2013	183	1056	1223	235	779	1901	---	2386	1880	194	238
				inches	15.1	32	25.8	23.9	28.3	23.7	34.8	29.5	82.5	79.2	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
F-450 Super Cab 4x4 w/o Spacer (7)	15,000 DRW	167.9		mm	383	814	643	610	718	602	889	749	2096	2014	183	1056	1223	235	779	1901	---	2386	1880	194	238
				inches	15.1	32	25.3	24	28.3	23.7	35	29.5	82.5	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
		191.9		mm	383	814	648	608	718	602	884	749	2092	2014	183	1056	1223	235	779	1901	---	2386	1880	194	238
				inches	15.1	32	25.5	24	28.3	23.7	34.8	29.5	82.4	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
F-550 Super Cab 4x2 w/o Spacer (7)	17,500 DRW	167.9	225/70R19.5G	mm	383	814	652	608	719	604	887	752	2101	2015	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.7	23.9	28.3	23.8	34.9	29.6	82.7	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
		191.9		mm	383	814	655	607	719	604	884	752	2096	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15	32	25.8	23.9	28.3	23.8	34.8	29.6	82.5	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
F-550 Super Cab 4x4 w/o Spacer (7)	17,500 DRW	167.9		mm	383	814	643	610	719	604	889	752	2096	2016	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.3	24	28.3	23.8	35	29.6	82.5	79.4	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
		191.9		mm	383	814	656	608	719	604	883	752	2096	2015	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.8	24	28.3	23.8	34.8	29.6	82.5	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
F-550 Super Cab 4x2 w/o Spacer (7)	19,500 DRW	167.9	225/70R19.5G	mm	383	814	654	610	702	609	864	758	2091	2019	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.7	24	27.6	24	34	29.9	82.3	79.5	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	6.8	9.4
		191.9		mm	383	814	664	607	702	609	860	759	2092	2017	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	26.1	23.9	27.6	24	33.8	29.9	82.4	79.4	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	6.8	9.4
F-550 Super Cab 4x4 w/o Spacer (7)	19,500 DRW	167.9		mm	383	814	652	608	701	609	865	759	2090	2018	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.7	23.9	27.6	24	34	29.9	82.3	79.4	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	6.8	9.4
		191.9		mm	383	814	656	607	701	609	861	759	2088	2017	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.8	23.9	27.6	24	33.9	29.9	82.2	79.4	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	6.8	9.4

1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances
2) Height at Base Curb Weight with standard springs.
3) Loaded Height at spring rating with standard springs.
4) FW for F350 DRW with Aluminum rim = 1766mm [69.5in] (4x2) and 1767mm [69.6in] (4x4). FW for F450/F550 DRW with Aluminum rim = 1916mm [75.4in].
5) AA is maximum grown width at maximum tire pressure and load.
6) CW is DRW Rear Track width measured at rim mating flange surface.
7) Low Deflection Spacer Option adds 51 mm (2.0 in) to R (Height at Rear Axle) Value

(A) F450/F550 RC 60CA with 42.2" Aft Axle Frame Extension.
(B) F550 RC 84CA with 32.4" Aft Axle Frame Extension.
(C) K (SRW) = 180mm [7.1in] for 6.7L Diesel, 165mm [6.5in] for 6.8L Gas.

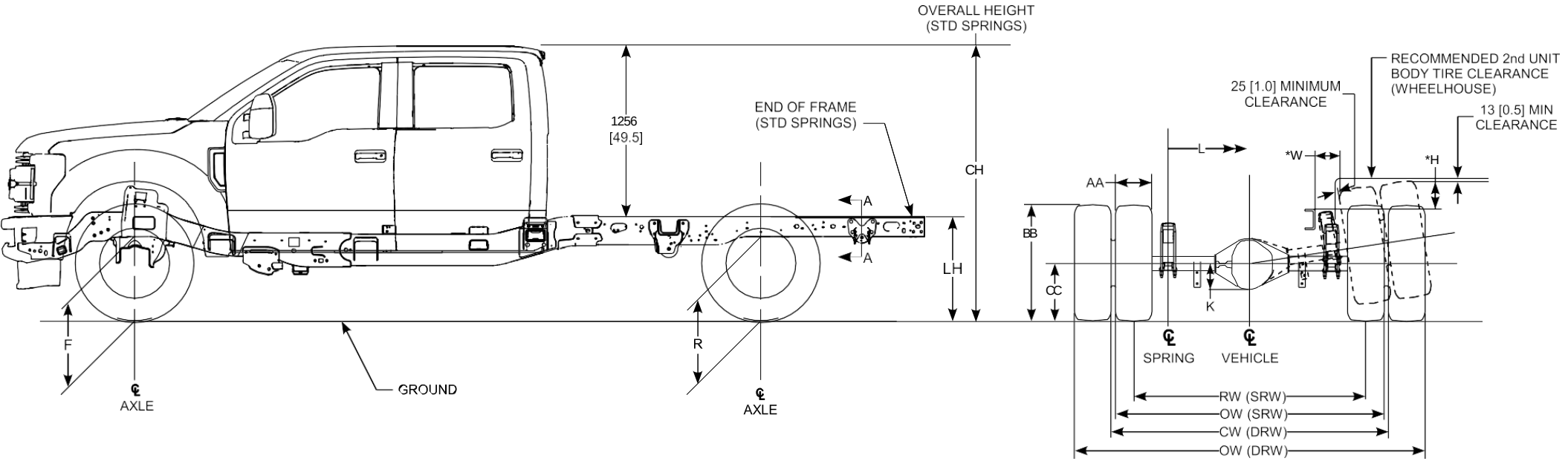
SRW – Single Rear Wheels
DRW – Dual Rear W heels

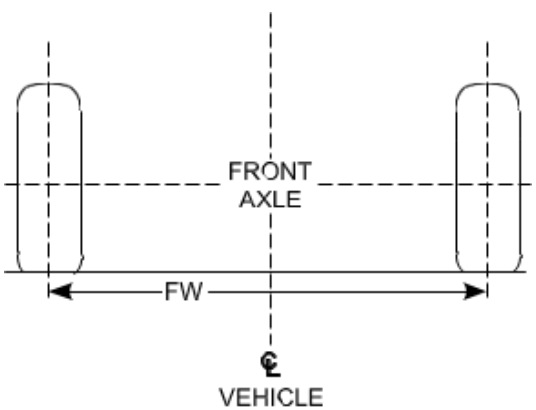
*H - Top of frame at C/L of rear axle to top of tire in jounce.
*L - From outside edge of shackle eyebolt
*W - Outside of frame to top of tire in jounce.

NOTE- [ ] DIMENSION ARE INCHES

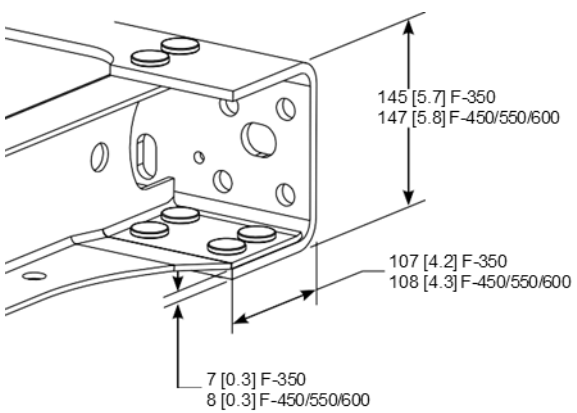
SUPER DUTY

CHASSIS CAB AXLE / TIRE / VEHICLE HEIGHT DATA – CREW CAB

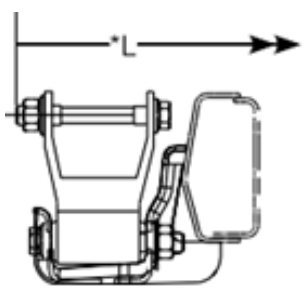




FRONT TREAD WIDTH



END OF FRAME



SECTION A
ENLARGED

NOTES:

- F AND R VEHICLE HEIGHT DIMENSIONS ARE FROM GROUND TO BOTTOM OF FRAME.
- LH IS FROM GROUND TO TOP OF FLOOR RIBS
- *H IS TOP OF FRAME AT CENTER LINE OF REAR AXLE TO TOP OF THE TIRE IN JOUNCE
- *L IS FROM THE OUTSIDE EDGE OF SHACKLE EYEBOLT
- *W IS OUTSIDE OF FRAME TO TOP OF TIRE IN JOUNCE

Body Builders Layout Book

SUPER DUTY

CHASSIS CAB AXLE / TIRE / VEHICLE HEIGHT DATA – CREW CAB (CONT)

MODEL	Standard GVWR (pounds)	WB (inches)	BASE TIRE	UNITS	CC (SLR)	TIRE DIAMETER	F Height at Front Axle (1)		R Height at Rear Axle (1)		LH(1)		CH(1)		K	L	L*	AA (5)	BB	FW (4)	RW	OW	CW (6)	*H	*W
							Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)	Base Curb (2)	Loaded (3)											
F-350 Crew Cab 4x2	9,800 SRW	179.7	LT245/75R17E	mm	375	807	549	515	644	538	815	691	2017	1939	180 (C)	1056	1223	265	779	1735	1729	1994	---	219	275
				inches	14.8	31.8	21.6	20.3	25.3	21.2	32.1	27.2	79.4	76.3	7.1	41.6	48.1	10.4	30.7	68.3	68.1	78.5	---	8.6	10.8
	14,000 DRW			mm	375	807	553	514	652	547	825	702	2024	1944	182	1056	1223	254	779	1755	---	2342	1805	219	189
				inches	14.8	31.8	21.8	20.2	25.7	21.5	32.5	27.7	79.7	76.5	7.2	41.6	48.1	10	30.7	69.1	---	92.2	71.1	8.6	7.4
F-350 Crew Cab 4x4	9,800 SRW	179.7		mm	375	807	639	600	700	596	863	741	2087	2007	180 (C)	1056	1223	265	779	1735	1729	1994	---	167	280
				inches	14.8	31.8	25.1	23.6	27.6	23.5	34	29.2	82.1	79	7.1	41.6	48.1	10.4	30.7	68.3	68.1	78.5	---	6.6	11
	14,000 DRW			mm	375	807	640	600	706	602	870	749	2091	2011	182	1056	1223	254	779	1755	---	2342	1805	165	193
				inches	14.8	31.8	25.2	23.6	27.8	23.7	34.3	29.5	82.3	79.2	7.2	41.6	48.1	10	30.7	69.1	---	92.2	71.1	6.5	7.6
F-450 Crew Cab 4x2 w/o Spacer (7)	15,000 DRW	179.7	225/70R19.5G	mm	383	814	650	608	715	602	884	749	2102	2015	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.6	23.9	28.1	23.7	34.8	29.5	82.8	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
		203.7		mm	383	814	652	607	718	602	882	750	2098	2014	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.7	23.9	28.3	23.7	34.7	29.5	82.6	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
F-450 Crew Cab 4x4 w/o Spacer (7)	15,000 DRW	179.7		mm	383	814	642	610	717	602	886	749	2099	2016	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.3	24	28.2	23.7	34.9	29.5	82.6	79.4	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
		203.7		mm	383	814	646	608	718	602	883	749	2095	2015	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.4	24	28.3	23.7	34.8	29.5	82.5	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
F-550 Crew Cab 4x2 w/o Spacer (7)	17,500 DRW	179.7	225/70R19.5G	mm	383	814	650	608	718	604	885	752	2102	2016	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.6	23.9	28.3	23.8	34.8	29.6	82.8	79.4	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
		203.7		mm	383	814	652	607	719	604	883	752	2098	2015	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.7	23.9	28.3	23.8	34.8	29.6	82.6	79.3	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
F-550 Crew Cab 4x4 w/o Spacer (7)	17,500 DRW	179.7		mm	383	814	650	608	718	604	885	752	2102	2016	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15	32	25.6	24	28.3	23.8	34.8	29.6	82.8	79.4	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
		203.7		mm	383	814	654	607	718	604	882	752	2099	2016	183	1056	1223	235	787	1901	---	2386	1880	194	238
				inches	15.1	32	25.7	23.9	28.3	23.8	34.7	29.6	82.6	79.4	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	7.6	9.4
F-550 Crew Cab 4x2 w/o Spacer (7)	19,500 DRW	179.7	225/70R19.5G	mm	383	814	652	610	701	609	863	758	2093	2020	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.7	24	27.6	24	34	29.8	82.4	79.5	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	6.8	9.4
		203.7		mm	383	814	661	607	701	609	859	759	2093	2018	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	26	23.9	27.6	24	33.8	29.9	82.4	79.5	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	6.8	9.4
F-550 Crew Cab 4x4 w/o Spacer (7)	19,500 DRW	179.7		mm	383	814	650	608	701	609	863	758	2092	2020	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.6	24	27.6	24	34	29.9	82.4	79.5	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	6.8	9.4
		203.7		mm	383	814	654	607	701	609	861	759	2089	2018	183	1056	1223	235	787	1901	---	2386	1880	172	238
				inches	15.1	32	25.7	23.9	27.6	24	33.9	29.9	82.3	79.5	7.2	41.6	48.1	9.3	30.7	74.8	---	94	74	6.8	9.4

1) The Height Data shown represents dimensions of a base/standard vehicle with no options. Actual height may vary due to production tolerances
2) Height at Base Curb Weight with standard springs.
3) Loaded Height at spring rating with standard springs.
4) FW for F350 DRW with Aluminum rim = 1766mm [69.5in] (4x2) and 1767mm [69.6in] (4x4). FW for F450/F550 DRW with Aluminum rim = 1916mm [75.4in].
5) AA is maximum grown width at maximum tire pressure and load.
6) CW is DRW Rear Track width measured at rim mating flange surface.
7) Low Deflection Spacer Option adds 51 mm (2.0 in) to R (Height at Rear Axle) Value

(A) F450/F550 RC 60CA with 42.2" Aft Axle Frame Extension.
(B) F550 RC 84CA with 32.4" Aft Axle Frame Extension.
(C) K (SRW) = 180mm [7.1in] for 6.7L Diesel, 165mm [6.5in] for 6.8L Gas.

SRW – Single Rear Wheels
DRW – Dual Rear W heels

*H - Top of frame at C/L of rear axle to top of tire in jounce.
*L - From outside edge of shackle eyebolt
*W - Outside of frame to top of tire in jounce.

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NOTE- [ ] DIMENSION ARE INCHES

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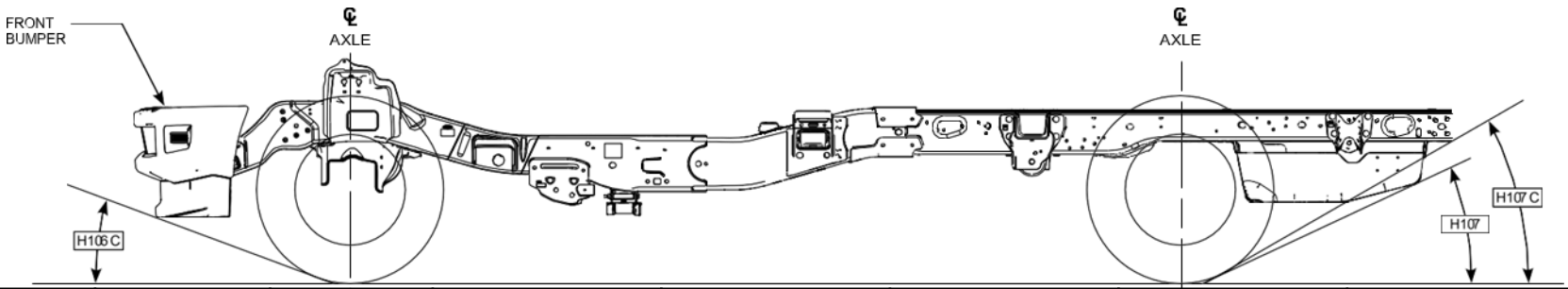
SUPER DUTY

CHASSIS CAB APPROACH & DEPARTURE ANGLES



TIRE	WHEEL EQUIPMENT	GVWR [lb.]	MODEL	WHEELBASE mm [in]	DRIVE	H106C APPROACH ANGLE*	H107C DEPARTURE ANGLE FRAME RAIL*	H107C DEPARTURE ANGLE AFT FUEL TANK*	H107 DEPARTURE ANGLE AFT FUEL TANK**
LT245/75R17E	SRW	9,800	F-350 Reg	3691 [145.3]	4x2	16.4	32.4	27.5	20.1
					4x4	16.4	34.8	30.7	23.3
			F-350 Super	4265 [167.9]	4x2	16.7	32	27.1	20
					4x4	17.2	34.2	30	23.1
			F-350 Crew	4565 [179.8]	4x2	16.8	31.7	26.8	19.9
					4x4	17.6	33.7	29.4	23.4
	DRW	14,000	F-350 Reg	3691 [145.3]	4x2	16.1	32.8	28	20.8
					4x4	16.3	34.8	30.7	23.7
				4301 [169.3]	4x2	16.7	32.4	27.7	20.7
					4x4	17.9	34.4	30.3	23.5
			F-350 Super	4265 [167.9]	4x2	16.5	32.3	27.5	20.7
					4x4	17.6	34.4	30.2	23.5
			F-350 Crew	4565 [179.8]	4x2	16.5	32.5	27.7	20.7
					4x4	17.5	34.2	30	23.4
225/ 70R19.5G	DRW	15,000	F-450 Reg	3691 [145.3]	4x2	23.8	35.2	31.2	23.6
							19.5 (A)		
					4x4	17.3	35.3	31.3	23.6
							19.5 (A)		
				4301 [169.3]	4x2	25.3	34.7	30.7	23.3
					4x4	18.1	34.8	30.8	23.3
				4911 [193.3]	4x2	25.5	34.5	30.5	23.3
					4x4	18.3	34.5	30.5	23.3
				5215 [205.3]	4x2	25.4	34.5	30.4	23.3
					4x4	18.8	34.4	30.4	23.3
			F-450 Super	4265 [167.9]	4x2	24.4	34.8	30.8	23.3
					4x4	17.9	34.7	30.7	23.3
				4875 [191.9]	4x2	25.2	34.5	30.5	23.3
					4x4	18	34.5	30.5	23.3
			F-450 Crew	4565 [179.8]	4x2	24.8	34.5	30.4	23.2
					4x4	17.6	34.6	30.5	23.2
				5175 [203.8]	4x2	25.2	34.4	30.4	23.4
					4x4	18	34.5	30.5	23.3

* Approach and Departure angles measured at Base Curb weight with Standard Springs

** Departure Angle to Aft Fuel Tank measured at Loaded Height with Standard Springs at Spring Rating

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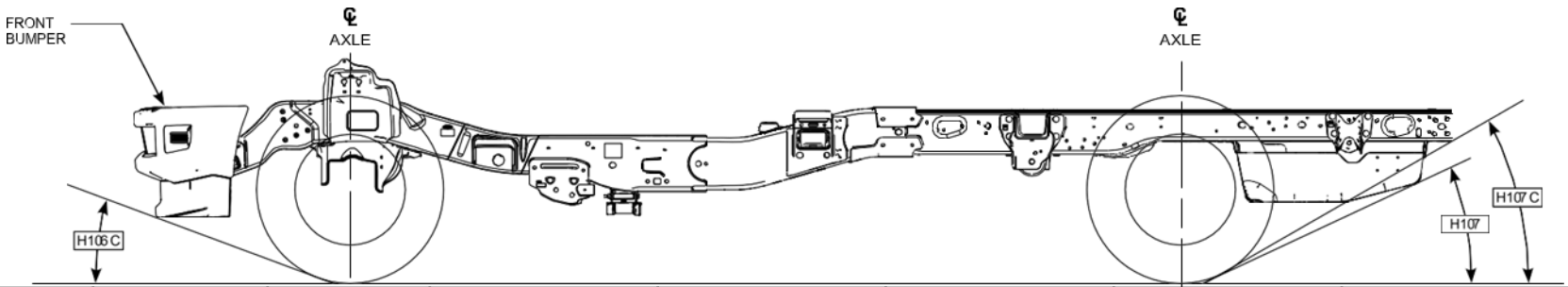
NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY

CHASSIS CAB APPROACH & DEPARTURE ANGLES (CONT)



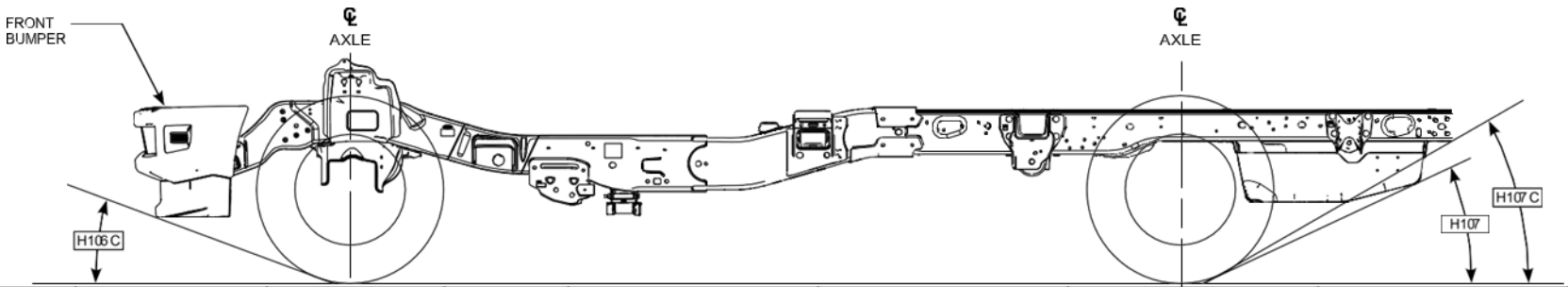
TIRE	WHEEL EQUIPMENT	GVWR [lb.]	MODEL	WHEELBASE mm [in]	DRIVE	H106C APPROACH ANGLE*	H107C DEPARTURE ANGLE FRAME RAIL*	H107C DEPARTURE ANGLE AFT FUEL TANK*	H107 DEPARTURE ANGLE AFT FUEL TANK**
225/70R19.5G	DRW	17,500	F-550 Reg	3691 [145.3]	4x2	24.6	35.2 19.5 (A)	31.2	23.7
					4x4	17.3	35.1 19.5 (A)	31.2	23.7
				4301 [169.3]	4x2	24.6	37.6	34.1	27.1
					4x4	18	37.5	34.1	27.1
				4911 [193.3]	4x2	26	34.4	30.5	23.5
					4x4	18.9	34.5	30.5	23.5
				5215 [205.3]	4x2	26	34.4	30.4	23.5
					4x4	18.8	34.4	30.4	23.5
			F-550 Super	4265 [167.9]	4x2	24.3	34.7	30.7	23.5
					4x4	17.9	34.8	30.7	23.5
				4875 [191.9]	4x2	25.2	34.5	30.5	23.5
					4x4	18.6	34.5	30.4	23.5
			F-550 Crew	4565 [179.8]	4x2	24.8	34.6	30.4	23.4
					4x4	17.6	34.5	30.4	23.4
				5175 [203.8]	4x2	25.3	34.5	30.4	23.5
					4x4	18.5	34.4	30.4	23.5
		19,500	F-550 Reg	4301 [169.3]	4x2	19.8	21.3 (B)	30.7	23.5
					4x4	19.8	21.3 (B)	30.7	23.5

* Approach and Departure angles measured at Base Curb weight with Standard Springs
** Departure Angle to Aft Fuel Tank measured at Loaded Height with Standard Springs at Spring Rating

NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY

CHASSIS CAB APPROACH & DEPARTURE ANGLES (CONT)



TIRE	WHEEL EQUIPMENT	GVWR [lb.]	MODEL	WHEELBASE mm [in]	Drive	H106C APPROACH ANGLE*	H107C DEPARTURE ANGLE FRAME RAIL*	H107C DEPARTURE ANGLE AFT FUEL TANK*	H107 DEPARTURE ANGLE AFT FUEL TANK**
245/70R19.5G	DRW	22,000	F-600 Reg	145.3	4X2	23.1	34.5	30.5	24.8
					4X4	22.6	34.6	30.6	24.8
				169.3	4X2	23.1	34.3	30.3	24.5
					4X4	22.6	34.3	30.3	23.9
				193.3	4X2	22.9	34.2	30.2	24.4
					4X4	22.4	34.3	30.3	24.4
				205.3	4X2	22.9	34.2	30.1	24.5
					4X4	22.3	34.3	30.2	24.5

* Approach and Departure angles measured at Base Curb weight with Standard Springs
** Departure Angle to Aft Fuel Tank measured at Loaded Height with Standard Springs at Spring Rating

NOTE- [ ] DIMENSION ARE INCHES

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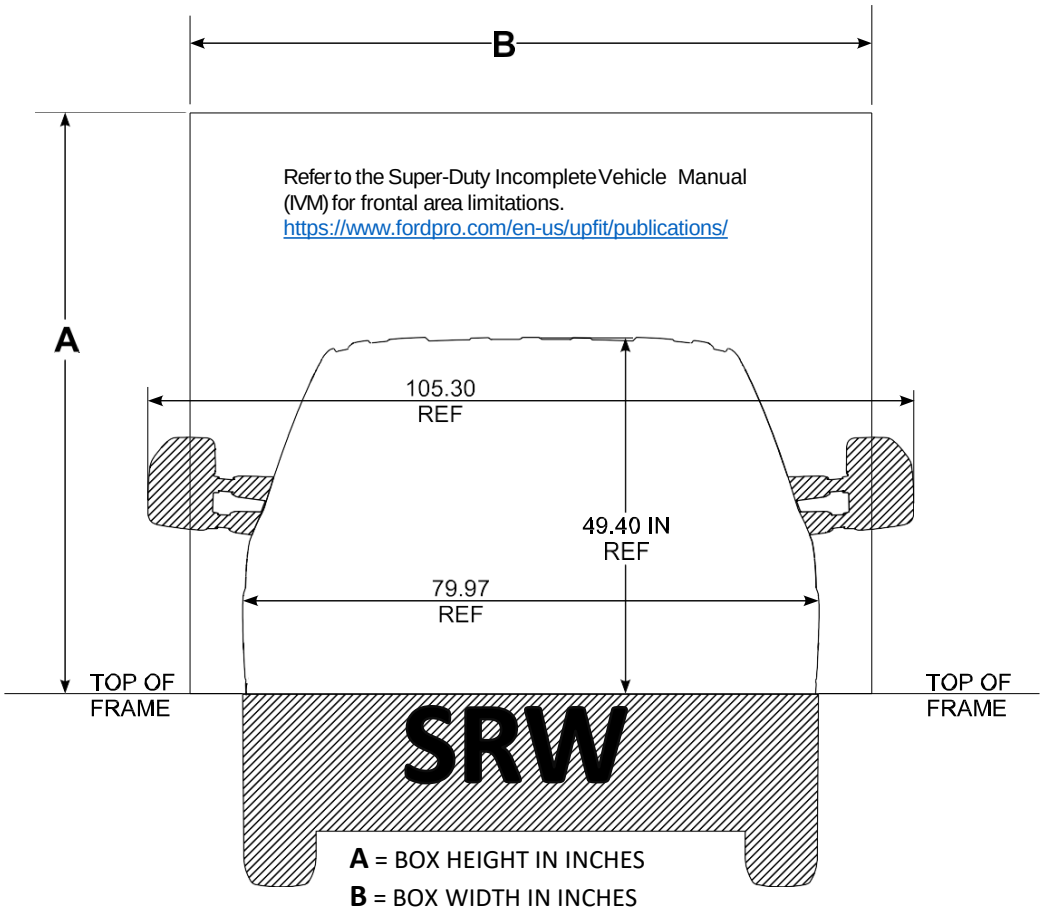
SUPER DUTY

FRONTAL AREA WORKSHEET SRW & DRW



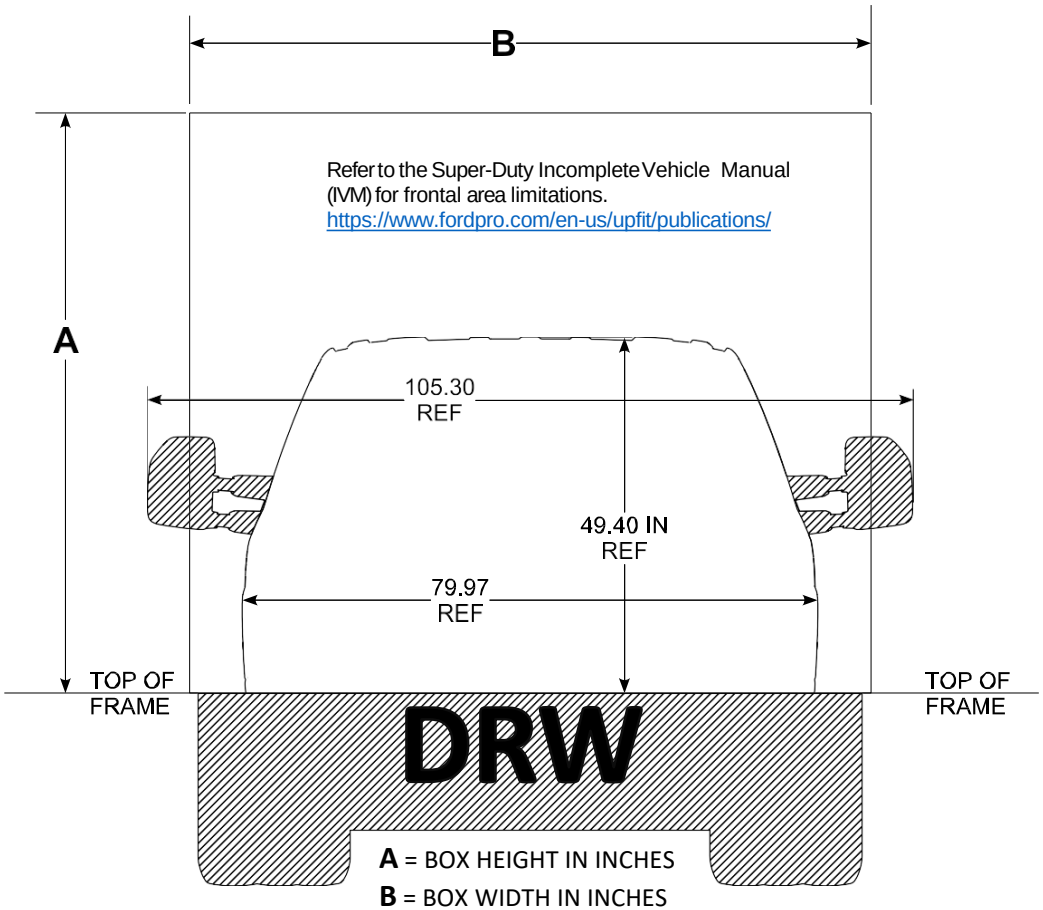
TO FIND FRONT SURFACE AREA IN SQ. INCHES: (A X B) + 1960.7 =

TO FIND FRONT SURFACE AREA IN SQ. FEET : ((A X B)) / 144) + 13.62 =

BELOW FRAME SHADED AREA = 1069490.0 / (25.4 X 25.4) = 1657.7128 SQ. IN. or 1657.7128 / (12 X 12) = 11.5118 SQ. FT

MIRROR SHADED AREA = (97748.7 X 2) / (25.4 X 25.4) = 303.0215 SQ. IN. or 303.0215 / (12 X 12) = 2.1043 SQ. FT.

TOTAL SHADED AREA = 1264987.4 / (25.4 X 25.4) = 1960.7343 SQ. IN. or 1960.7343 / (12 X 12) = 13.6162 SQ. FT.



TO FIND FRONT SURFACE AREA IN SQ. INCHES: (A X B) + 2366.8 =

TO FIND FRONT SURFACE AREA IN SQ. FEET : ((A X B)) / 144) + 16.44 =

BELOW FRAME SHADED AREA = 1331440.0 / (25.4 X 25.4) = 2063.7361 SQ. IN. or 2063.7361 / (12 X 12) = 14.3315 SQ. FT

MIRROR SHADED AREA = (97748.7 X 2) / (25.4 X 25.4) = 303.0215 SQ. IN. or 303.0215 / (12 X 12) = 2.1043 SQ. FT.

TOTAL SHADED AREA = 1526937.4 / (25.4 X 25.4) = 2366.7577 SQ. IN. or 2366.7577 / (12 X 12) = 16.4358 SQ. FT.

NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY
AMBULANCE GUIDANCE

FORD AMBULANCE GUIDANCE

A Ford vehicle is suitable for final stage manufacture into an ambulance only if equipped with a Ford Ambulance Preparation Package. Ford urges ambulance manufacturers to follow the recommendation furnished in the Incomplete Vehicle Manual, (and any pertinent supplements), and the Ford Pro Upfitter guidelines. ***Using a Ford Vehicle without the Ford ambulance Preparation package to produce an ambulance voids the Ford warranty and could result in elevated the underbody temperature, fuel over-pressurization and the risk of fuel expulsion and fires.*** Vehicles equipped with Ford Ambulance Preparation packages have labels located on (the inside) driver door lock pillar that state that the vehicle is so equipped.

INFORMATION:

Ford urges careful consideration of the recommendations that follow. They are based on analyses of component and vehicle tests, actual service situation, and engineering judgements. Disregard of these recommendations may affect the durability, reliability, handling and performance characteristics of a completed vehicle and may elevate underbody temperature and increase the potential for fire or may affect the safety of the occupants in the event of an accident.

These recommendations are supplemental to U.S. and Canadian Motor Vehicle Safety compliance representations provided here https://www.fordpro.com/en-us/upfit/publications/
. Additional information is also provided in this book and the Ford Truck Shop Manual which may be helpful to Subsequent stage manufacturers are encouraged to contact the Ford Body Builder Advisory Service if they have any question concerning these recommendations; contact information is available online at https://www.fordpro.com/en-us/upfit/publications/

GUIDELINES

1. All Exhaust System, Electrical and Underbody Heat Management statements in the Second Unit Body Mounting section, and also the GENERAL BBLB document found on https://www.fordpro.com/en-us/upfit/publications/, apply to completed ambulance type vehicles.
2. Equipment such as flashing lights and sirens, spare tire, or any other accessories should not be installed in the grille area forward of the radiator or air cleaner air-inlet. Doing so restricts proper airflow through the radiator and engine compartment. Lights, Speakers or sirens should not be mounted in the center area of the grille. Equipment should be mounted as far outboard as possible, not to exceed 90 square inches each or 180 square inches combined in area. A front license plate mounted in the factory position is not considered “equipment” in this case.
3. Electrical equipment, regardless of mounting location, should not be grounded through the hood sheet metal nor hinges due to possible damage to the radio system and wiring.
4. An ambulance is not to be used as a tow vehicle.

KEEP THIS AREA CLEAR OR UNOBSTRUCTED

PROPER AIRFLOW IS REQUIRED FOR:
- ENGINE COOLING,
- RADIATOR,
- AIR CONDITIONER CONDENSOR

SUPER DUTY
SPOTLIGHT MOUNTING GUIDELINES (ON A-PILLAR)

SPOTLIGHT MOUNTING

Upfitters may consider mounting a hand operated spotlight to the Super Duty A-pillar by utilizing a maximum ½ inch diameter hole per these guidelines.

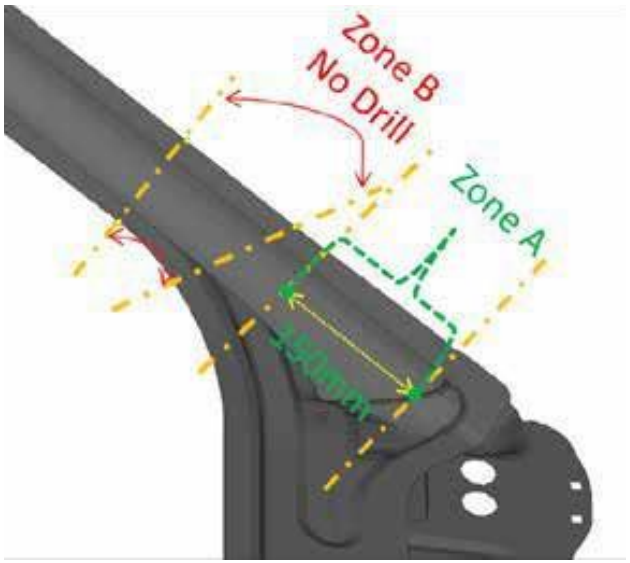


Figure 1 – Drill Zone

Drill hole in Zone A from A-pillar outer surface at the angle required to mount the spotlight. Do not drill the A-pillar and its components at Zone B (outer surface, hydro-formed tube and innermost surface).
Avoid any components/assemblies held within or between the A-Pillar structure and the plastic interior trim when drilling attachment holes.

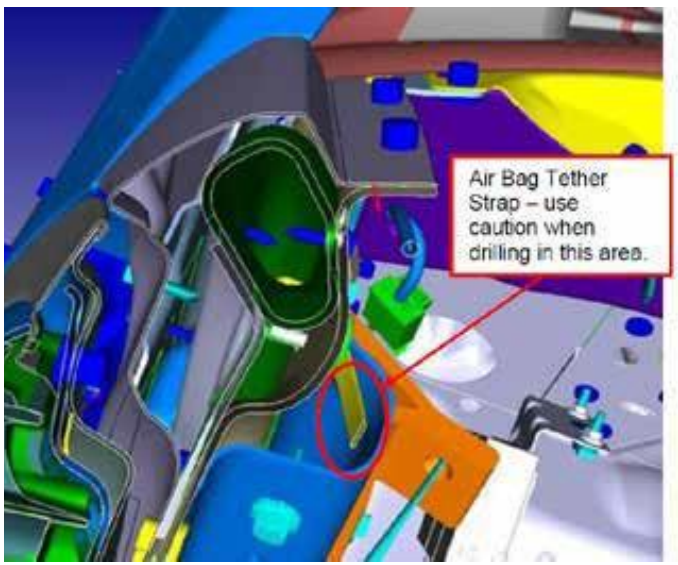


Figure 2: A-Pillar Cross Section

Cross sectional view looking down on the A-Pillar from above showing the structural layers of the A-Pillar

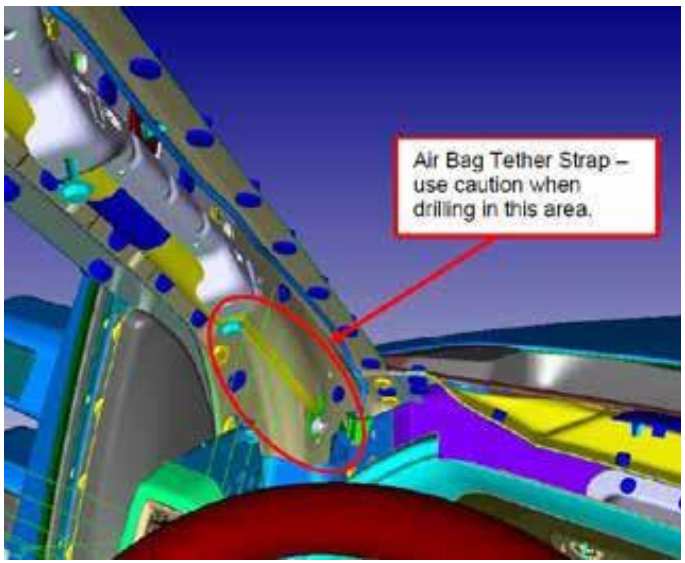


Figure 3: Air Bag Tether

Interior wall attachment of the air bag tether. Care must be taken when drilling through the A-Pillar to avoid the tether.

NOTE: THE FINAL RESPONSIBILITY FOR THE COMPLIANCE OF THE COMPLETED VEHICLE RESTS WITH THE VEHICLE MODIFIER TO CERTIFY, AS PRESCRIBED BY TITLE 49, CODE OF FEDERAL REGULATIONS, PART 567.5, THAT THE VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS

SUPER DUTY

FENDER MOUNTED MIRROR ATTACHMENT PROVISIONS

FOR APPLICATIONS THAT REQUIRE A FENDER MOUNTED MIRROR OR OTHER SIMILAR EQUIPMENT (RH ONLY):

Recommended attachment strategy:

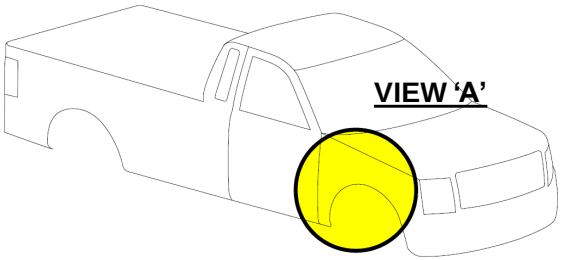
- Use 3 holes available on the RH Front Structure to attachment a mirror mounting bracket or base.
- Attach mirror to mounting bracket/base through hole(s) added to fender.

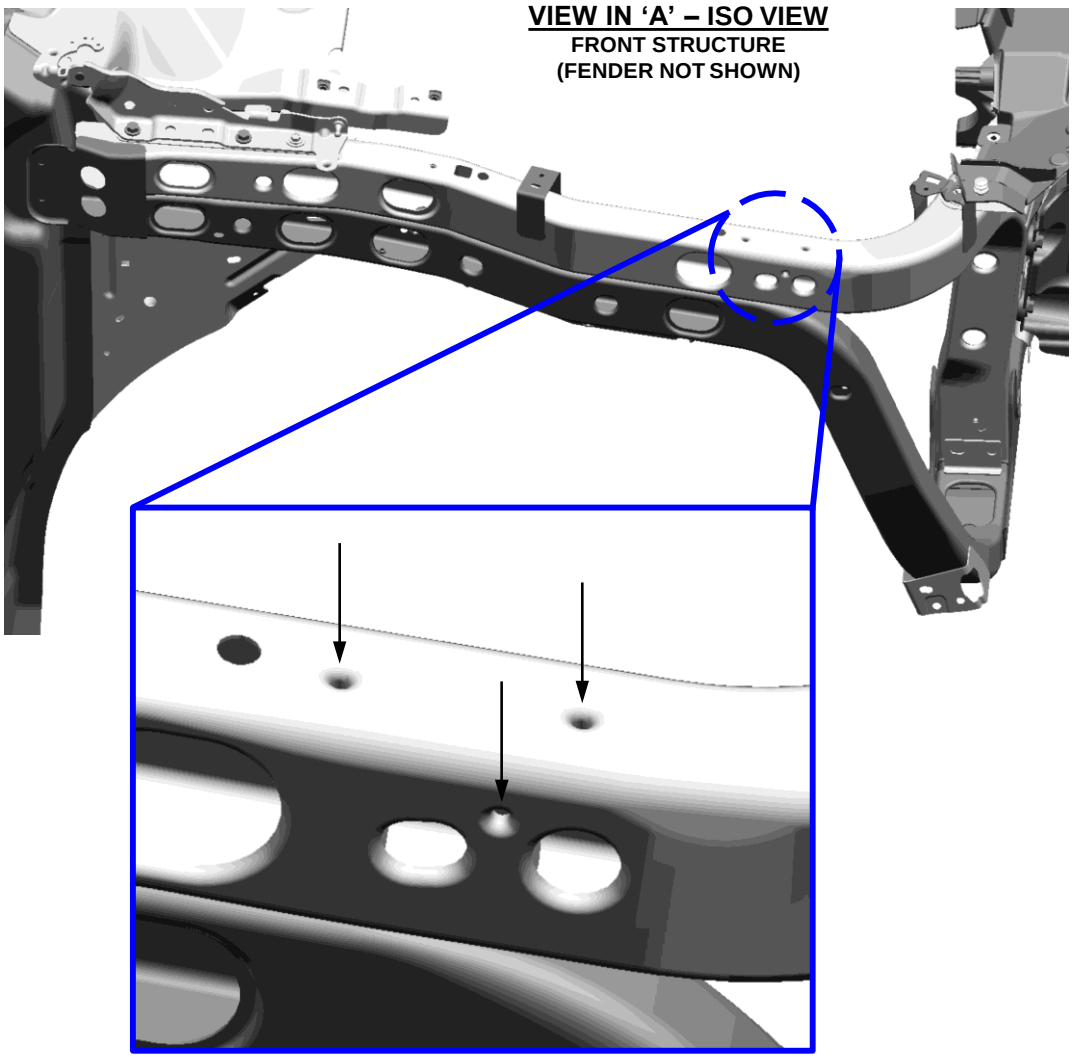
Notes:

Holes are extruded and unthreaded, suitable for M6 thread rolling / self-tapping fasteners:

- Recommend Ford W714339-S439 M6 x 22mm screw and washer (or equivalent).
  - Washer diameter – 23mm [0.91 in]
  - Suitable to attach material up to 8mm [0.31 in.] thick
  - Torque to 7 +/- 1.1 Nm [5.2 +/- lb. ft.] - Upfitter needs to confirm clamped material can withstand this load
- Extruded holes can also be tapped for M6 thread
  - Allows use of standard M6 threaded fastener
  - Upfitter needs to develop torque specification

CAD data is available through https://www.fordpro.com/en-us/upfit/cad/. Request data for the RH Front Shotgun and RH Front Fender along with other components needed for reference.





SUPER DUTY

AFTERMARKET AUX AC SYSTEM CONTROL & GHG EVAPORATIVE EMISSIONS

This is a summary of BBAS Bulletin Q-255 for Super-Duty Chassis Cab trucks. Refer to the actual bulletin, located on https://www.fordpro.com/en-us/upfit/publications/ for the full instructions for Final Stage Manufacturers to add auxiliary air conditioning systems. No prep packages are available. Tap into the system using custom lines that obtain the liquid between the receiver dryer and front Thermostatic Expansion Valve (TXV) and return the suction line between the front TXV and the compressor. The secondary evaporator must use a TXV.

The performance of the Ford defrost and defog system must not be diminished by the addition of auxiliary heater or air conditioning systems. Final Stage Manufacturers are reminded of their responsibility to maintain compliance to FMVSS 103 and CMVSS 103, Windshield Defrosting and Defogging Systems.

The addition of aftermarket auxiliary air conditioning will require control of the AC clutch via vehicle CAN bus. It is recommended that when installing an auxiliary AC/Heater system package the Final Stage Manufacturer meet or exceed the current standard of the current production vehicle line in occupant comfort performance both in heating and air conditioning.

AIR CONDITIONING

1. R134a charged AC systems must use PAG type lubricating oil YN-12-D, Ford part number WSH-M1C231-B. Always use the same refrigerant and oil as equipped with the production vehicle.

F-350 / 450 / 550	TRANSIMISSION	R134A (oz)	PAG OIL (oz)
GAS or DIESEL	ANY	27 +/- 1.0	3.7

2. Ford Motor Company front system specs:
   - TXV size: 2.0 Ton (Gas with TorqShift ® 6R or 5-Spd Manual).
   - TXV Size: 1.5 Ton (Gas or Diesel with TorqShift ® 10R).
   - AC Compressor Displacement: 200cc fixed (Gas with TorqShift ® 6R or 5-Spd Manual).
   - AC Compressor Displacement: 170cc eVDC (Gas or Diesel with TorqShift ® 10R).
   - AC Condenser heat rejection (Gas): 11.3KW avg (Gas with TorqShift ® 6R).
   - AC Condenser heat rejection (Diesel): 11.3KW avg (Gas or Diesel with TorqShift ® 10R).
   - AC Condenser heat rejection (Gas with 10-speed transmission): 12.9 Kw
3. Auxiliary AC unit musts:
   - Do NOT use CCOT / orifice tube systems in combination with the front Ford Motor Company TXV system.
   - A TXV with a refrigerant bleed is required. This will allow oil and refrigerant to return back to the AC Compressor.
   - It is the responsibility of the Final Stage Manufacturer when combining an auxiliary AC system with the Ford Motor Company AC system to perform a REFRIGERANT CHARGE LEVEL DETERMINATION TEST and OIL IN CIRULATION and EVAPORTATOR CORE ICING.
   - ***It is the responsibility of the Final Stage Manufacturer to maintain a 0.5%-1.5% suspended oil ratio in the AC system for proper compressor lubrication.***
   - A label stating the total refrigerant charge, type of refrigerant (R134a), and type of compressor lubricating oil (PAG), must be affixed in a conspicuous place in the engine compartment.
   - Compressor discharge gas temperature should not exceed 130°C skin temperature when measured under any conditions. Skin temperature should be measured on the AC discharge line immediately out of the compressor below the muffler.
   - R-134a charged A/C systems should use barrier type A/C hose, SAE J3062 Hose Type Cu. Swaged, permanent fittings are recommended for this type of hose. Joint or connection types (serviceable fittings) should be Seal Washer, Dual Seal Washer, Seal Washer with O-ring, or Metal Seal Fitting (Metal Gasket) as shown in SAE J2727
4. At no time should the fan shroud or stator be modified or trimmed.
5. Do not modify any of the front-end seals to the cooling module. These prevent hot air recirculation from coming back into the AC Condenser.
6. Establish a quality control method to inspect and resolve leaks, kinks, inadequate clearance issues, and total system operations.
7. DO NOT splice into any compressor wire harness. Must use an aftermarket CAN vehicle-control module to communicate with vehicle to activate compressor clutch.
8. If rear AC system is ON the front AC may be ON or OFF. The aftermarket CAN control module will request the AC clutch on if the rear AC is on and the front AC is off.

GREEN HOUSE GAS (GHG) EVAPORATIVE EMMISSIONS

Pursuant to California regulation 17 CCR §95663, the specific leakage for this vehicle (as built by Ford Motor Company) is shown in the table below (see “J2727 Leakage Value” column). If the vehicle air conditioning system is modified in any way, or air conditioning systems are added, the intermediate or final-stage manufacturer must calculate the final system leakage. If desired, the spreadsheet used by Ford to calculate the J2727 Leakage is available and can be edited to reflect the modified system. Please contact Ford BBAS to request a copy of the vehicle line specific GHG Evaporative Emissions Worksheet: https://www.fordpro.com/en-us/upfit/contact-us/

MY	Vehicle Line	Features/ Models	Evaporator	Engine	Refrigerant	Charge Size of A/C System (kg)	J2727 Leakage Value (g/yr.)	Max Allowed Leakage
2023	Super Duty	All	Single	6.8L & 7.3L Gas	R-134a	0.765	6.4	11.5
2023	Super Duty	All	Single	6.7L Diesel	R-134a	0.765	6.4	11.5

SUPER DUTY

GUIDELINES FOR MODIFYING WHEELBASES WHEN EQUIPPED WITH ELECTRONIC STABILITY CONTROL (ESC)

The 2023MY F-Series have Electronic Stability Control (ESC) as standard feature content. Modification of the wheelbase can affect vehicle performance which could result in ABS or Stability Control faults/lights. The ESC system may also have a changed response from the production wheelbase configuration, but still provides acceptable driver assistance. It is the responsibility of the alterer or final stage manufacturer to evaluate modified vehicle configurations to ensure that vehicle performance is acceptable to their customer base.

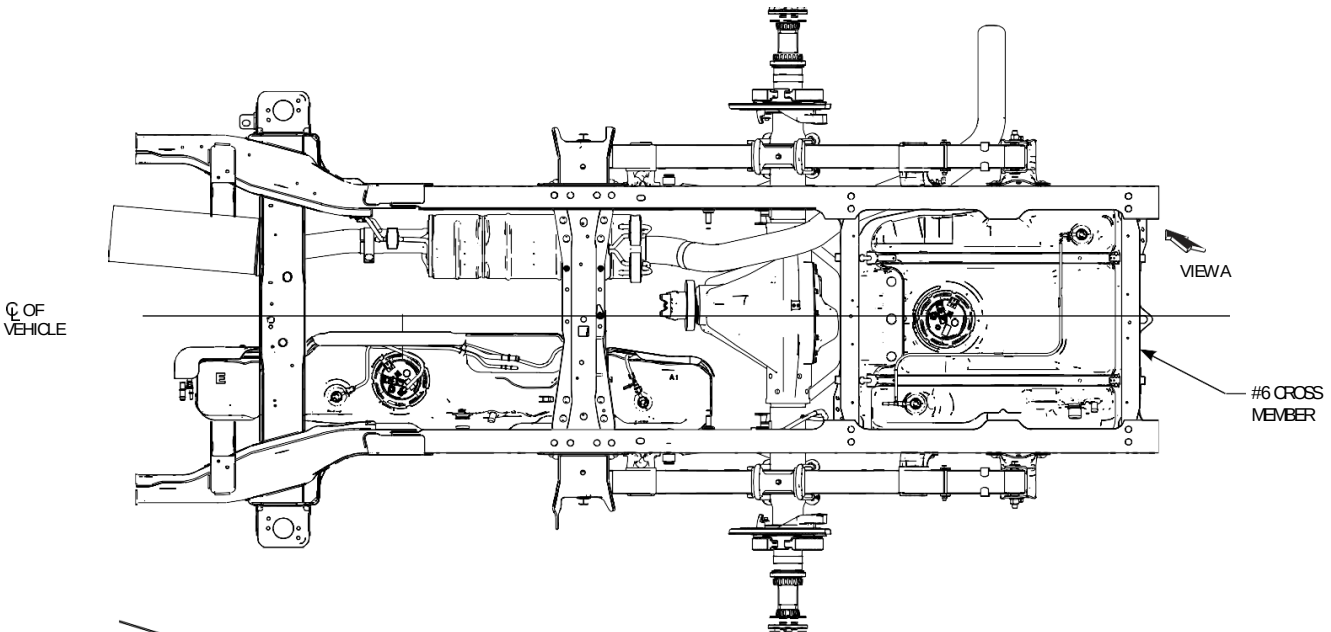
Wheelbase modifications within the noted ranges below may necessitate a reflash of the ABS/ESC module to a new calibration. Any wheelbase outside of the noted ranges below will not be supported with calibrations. The Electronic Stability Control (ESC) feature will be supported when modifying F-Series Wheelbases (WB) as part of the intermediate or final stage upfit.

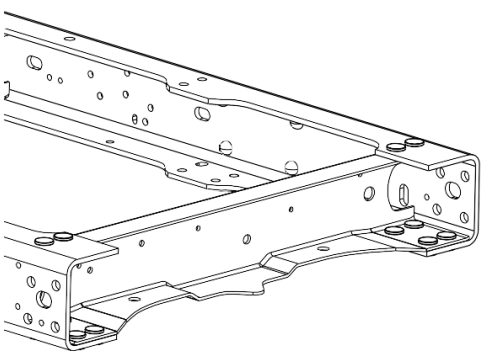
SUPER DUTY :
- F-450, F-550, and F-600
- Wheelbases between 145” and 267”

SPECIAL NOTES: The chassis wheelbase shall not be modified shorter than the shortest for each model (GVWR offered). For vehicles under 10K GVWR, FMVSS 126 does apply for ESC function and will need to be tested the by alterer or final stage manufacturer - refer to the Incomplete Vehicle Manual for specific FMVSS/CMVSS information

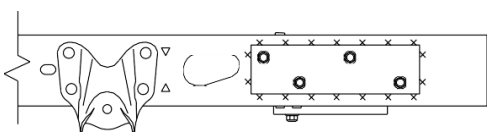
SUPER DUTY

CHASSIS CAB (NARROW FRAME) FRAME EXTENSION RECOMMENDATIONS





VIEW A
(TYPICAL)



REINFORCEMENT PLATES

FRAME EXTENSION RECOMMENDATIONS
(Applicable to all wheelbase models)

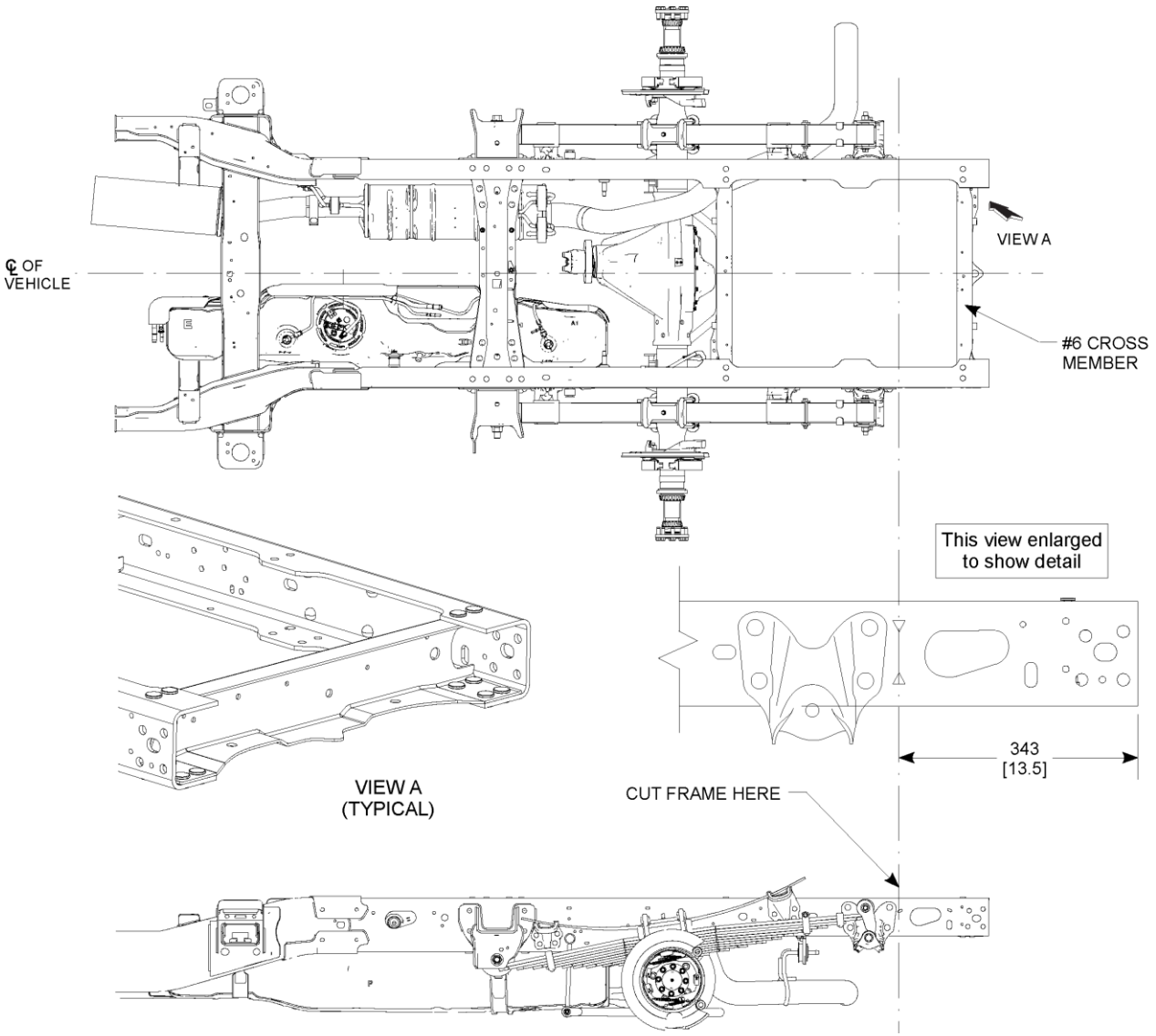
When it is necessary to add a frame extension to the Super Duty F-Series Chassis Cab, follow these suggestions:

- Clean contaminants off the back portion of the frame using steam, high pressure water or solvent.
- Protect the fuel system from weld sparks and splatter, being particularly careful with the rubber fuel fill hoses.
- Select a suitable mild steel channel (not iron) with a section modulus the same as the frame to be extended.
- Chamfer both the back of the frame and the end of the extensions to be welded. Remove the two rearmost lower rivets attaching the rear cross member to the frame. Weld an overlay plate onto the lower flange of the frame extension that extends approximately 2.5" under the frame end.
- Transfer the rivet hole location to the lower flange overlay plate and drill through the plate.
- ***Disconnect the battery(ies), the ABS module, and then the Powertrain Control Module (PCM). Connect the welding ground cable to the frame at the back of the vehicle.***
- Clamp the extension into place and weld all around the top and sides, but not the lower flange, following normal welding practices.
- Grind the outer side of the vertical frame web down smooth, clamp on a reinforcement section of mild steel approximately 4"x 12" x 0.25“ and skip weld to the frame and extension. Do not weld at the corners of the reinforcement to minimize stress concentrations. Note that this reinforcement may be combined with a rear shear plate and/or under-run bumper if desired, in which case it would be an "L" shape to pick up the added attachment points.
- Bolt through the lower overlay plate and frame section using a 5/8" Grade 5 flange-head bolt and nut (1).
- Drill through the frame and reinforcement; bolt using four 1/2" Grade 5 flange-head bolts and nuts (1).
- Coat the frame extension with a suitable protective paint. Reconnect the PCM module, ABS module and battery(ies).

(1) - If flange-head fasteners are not available, regular hex heads may be substituted with one flat washer each under the head of the bolt and nut.

SUPER DUTY

CHASSIS CAB (NARROW FRAME) FRAME OVERHANG SHORTENING RECOMMENDATIONS



FRAME OVERHANG SHORTENING RECOMMENDATIONS
(Applicable to all wheelbase models)

If a shorter rear frame overhang is required for the vocational body mounting, the builder must:

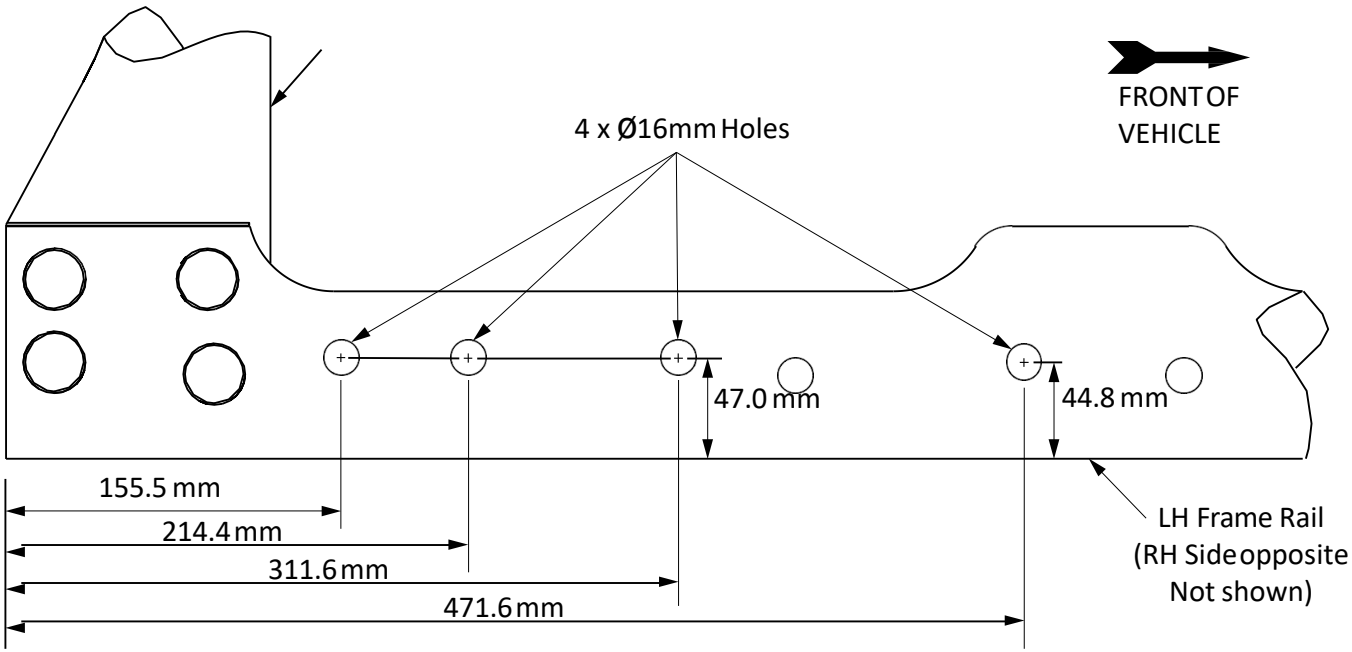
1. Order the chassis with the optional mid-ship fuel tank
2. Drill out the attaching rivets and remove the rear crossmember. Reinstall in the next forward crossmember mounting location provided using the Grade 8 bolts, as described in the rivet replacement procedure in the Ford Service Manual
3. Cut the frame along the line through the two triangle-shaped holes as depicted on this page using a cut-off wheel or saw. A torch is not recommended. If a torch is used within 4-inches of the rear suspension mounting attachments, these attachments must be either re-torqued (when bolts are used) or have the rivets removed and replaced with Grade 8 bolts per procedure noted above.

NOTE:

– ON THE F-450/550 CHASSIS, THE FORWARD OUTBOARD REAR SUSPENSION BRACKETBOLT NEEDS TO BE SHARED WITH THE REAR CROSSMEMBER. RETORQUE WITH NEW GRADE 8 M12 BOLT AND NUT

SUPER DUTY

CHASSIS CAB AFTERMARKET HITCH INSTALLATION



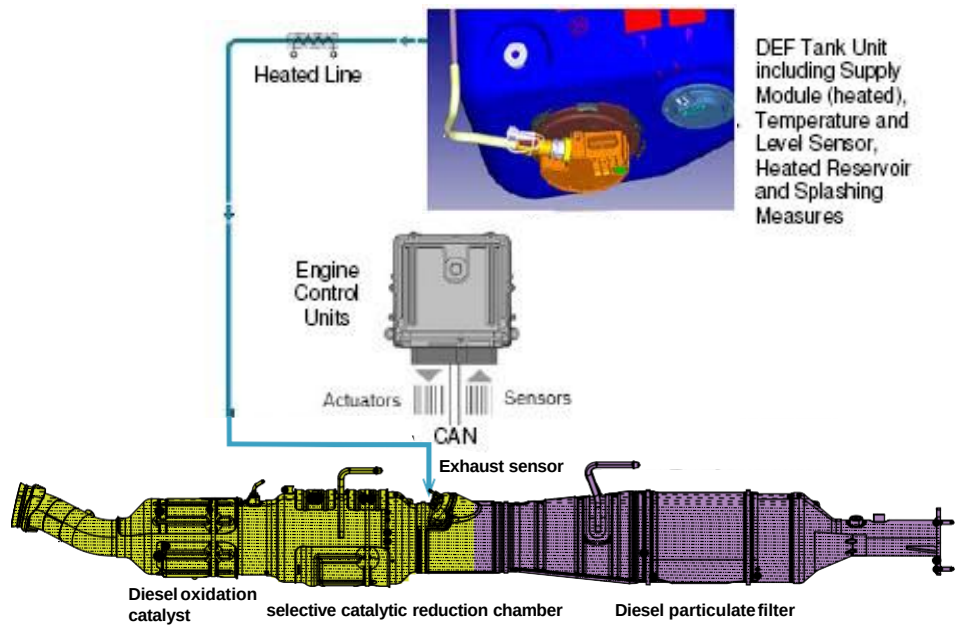
REVERSE PLAN VIEW

Four holes are in each frame-rail (in the bottom flange). These holes are to facilitate the installation of aftermarket trailer hitches. Aftermarket hitch load ratings are the responsibility of the aftermarket hitch manufacturer. The maximum trailer tow rating published in the Ford RV & Trailer Tow Guide must not be exceeded.

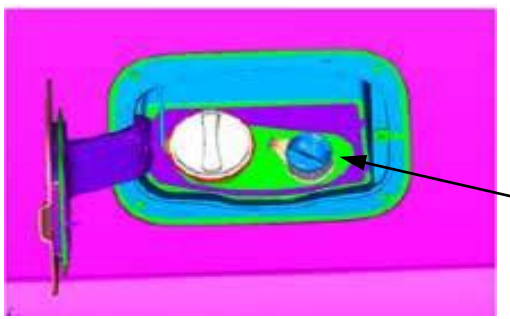
NOTE- [ ] DIMENSION ARE INCHES

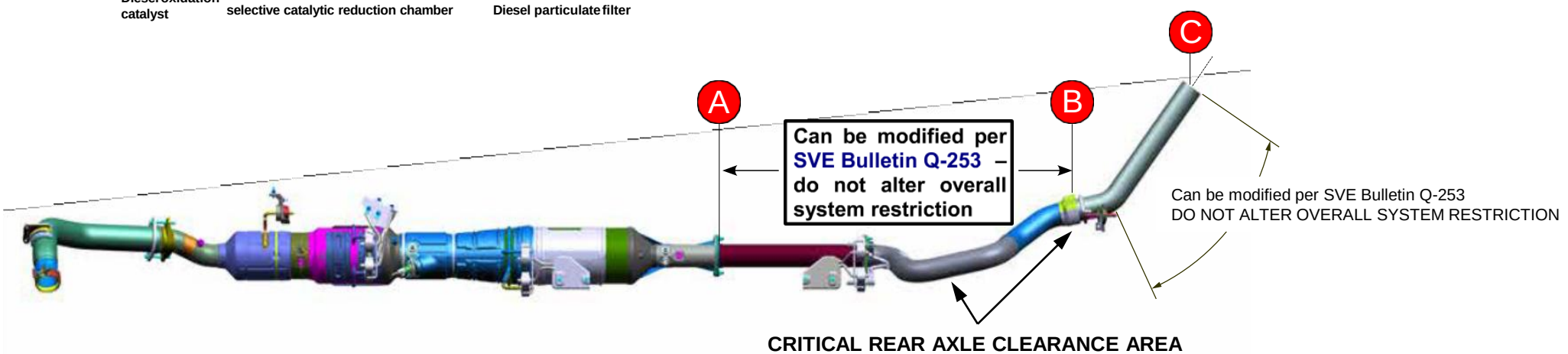
SUPER DUTY

EXHAUST AFTER TREATMENT (DIESEL ENGINE)



- Selective Catalyst Reduction (SCR) to help meet diesel emissions requirements
- Requires the use of Diesel Exhaust Fluid (DEF – aka UREA)
- The DEF tank is sized to sustain a typical oil change interval
- The tank and lines are heated to prevent freezing
- The pickup truck DEF fill cap is located next to the diesel fill cap




A
B
C
Can be modified per SVE Bulletin Q-253 – do not alter overall system restriction
Can be modified per SVE Bulletin Q-253
DO NOT ALTER OVERALL SYSTEM RESTRICTION

CRITICAL REAR AXLE CLEARANCE AREA

- **PT A** – **PT B**: Any modifications between Pts **A** – **B** must not shorten the centerline length between the two points to a length less than that of the shortest wheelbase. Minimum Centerline Length = 1160 mm for reference.
- **PT B** – **PT C**: Any modifications between Pts **B** – **C** must not shorten the centerline length between the two points and should be made using pipe diameter equivalent to the OEM assembly. Minimum Centerline Length – 763.75 (for reference).
- Modifications must not change system restriction or alter the performance of the exhaust system.
- Pipes used in any modifications must be equivalent diameter, wall thickness and material the OEM parts.
- Appropriate heat shielding must be utilized where required.

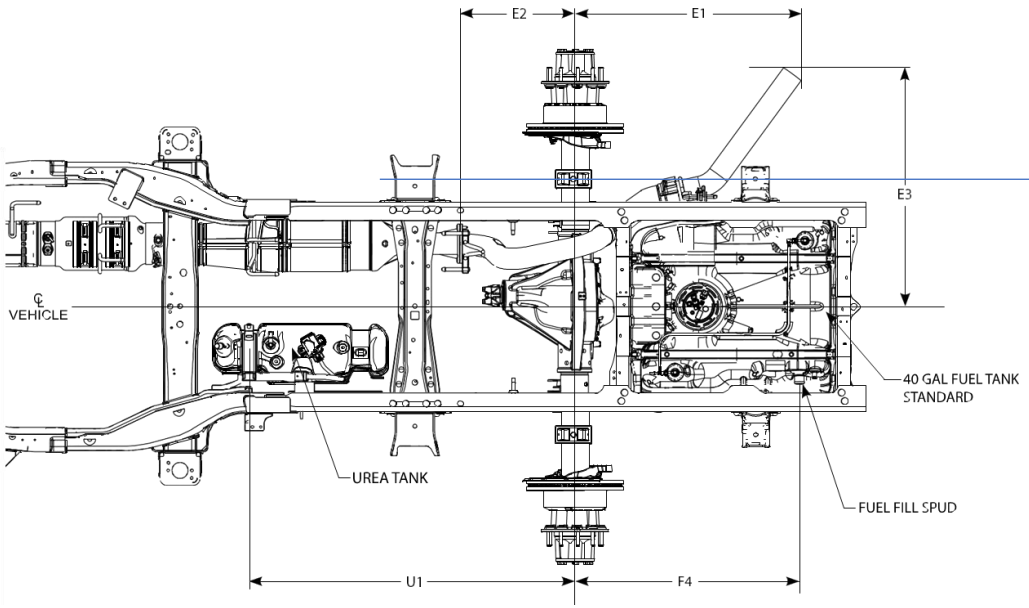
Ford PRO

Body Builders Layout Book

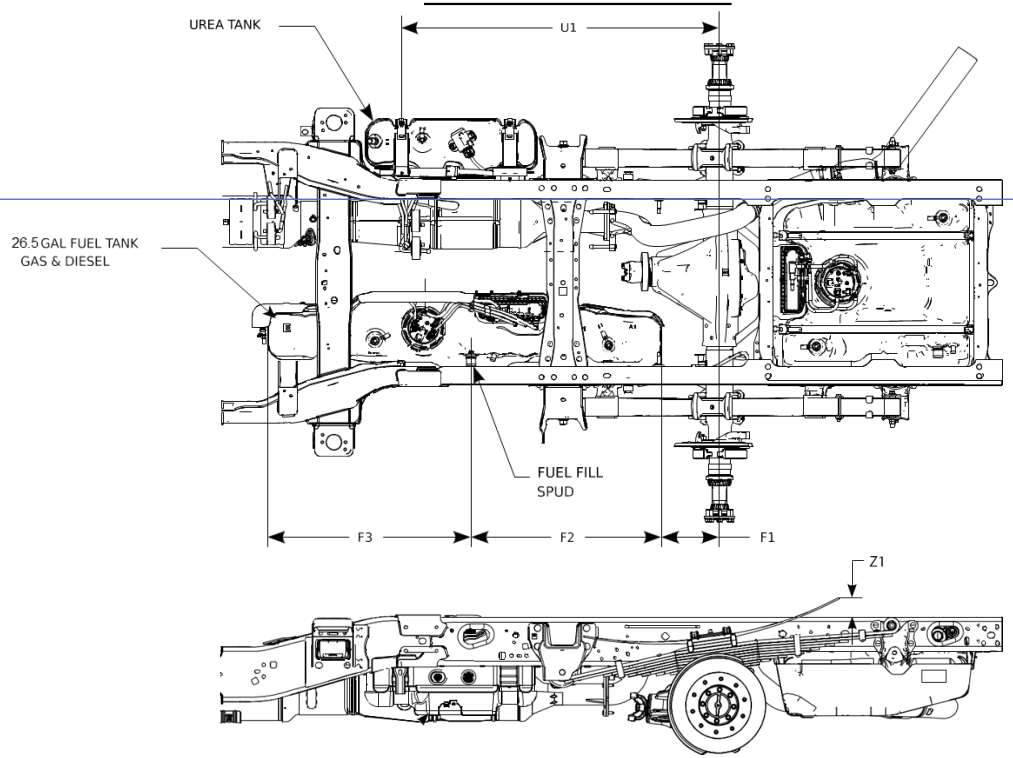
SUPER DUTY

CHASSIS CAB (NARROW FRAME) - FUEL TANK / EXHAUST / UREA / AUX BRACKET DIMENSIONS

INBOARD UREA TANK



OUTBOARD UREA TANK



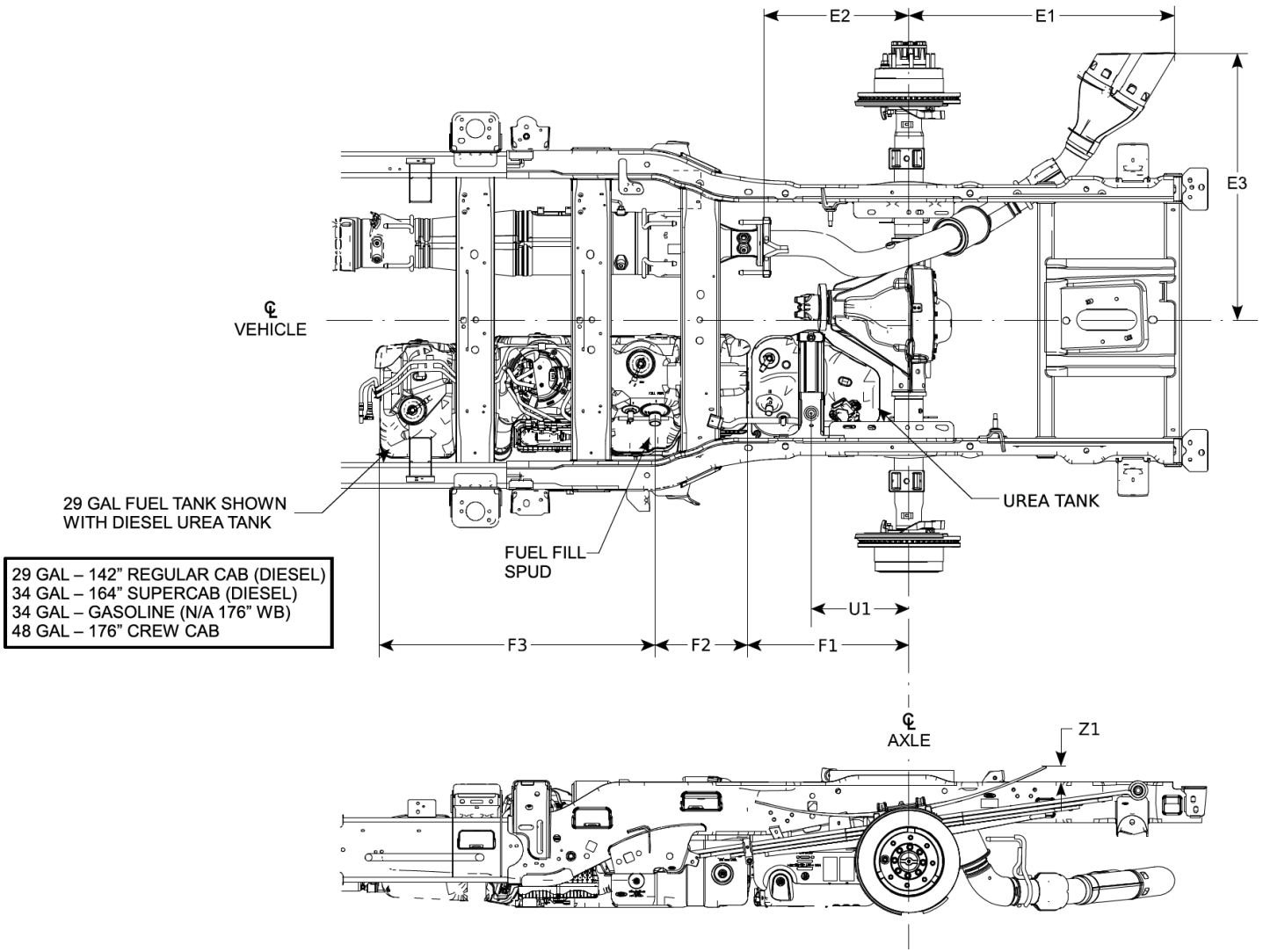
MODEL	WHEELBASE	FUEL TANK DIMENSIONS				EXHAUST SYSTEM DIMENSIONS			UREA TANK		AUX BRACKET
Chassis Cab	(in)	F1 (mm / in.)	F2 (mm / in.)	F3 (mm / in.)	F4 (mm / in.)	E1 (mm / in.)	E2 (mm / in.)	E3 (mm / in.)	U1 INBOARD MTD. (mm / in.)	U1 OUTBOARD MTD. (mm / in.)	Z1 (mm / In.)
REGULAR CAB	145	251 / 9.9	803 / 31.6	858 / 31.7	928 / 36.5	1014 / 40.0	475 / 18.7	938 / 37.0	1351 / 53.2	1351 / 53.2	44 / 1.7
	169	251 / 9.9	803 / 31.6	858 / 31.7	928 / 36.5	1014 / 40.0	1087 / 42.8	938 / 37.0	1351 / 53.2	1961 / 77.2 *	44 / 1.7
	193	251 / 9.9	803 / 31.6	858 / 31.7	928 / 36.5	1014 / 40.0	1696 / 66.8	938 / 37.0	1351 / 53.2	2570 / 101.2 *	44 / 1.7
	205	251 / 9.9	803 / 31.6	858 / 31.7	928 / 36.5	1014 / 40.0	2001 / 78.8	938 / 37.0	1351 / 53.2	2875 / 113.2 *	44 / 1.7
SUPER CAB	168	251 / 9.9	803 / 31.6	858 / 31.7	928 / 36.5	1014 / 40.0	1051 / 41.4	938 / 37.0	1351 / 53.2	1351 / 53.2	44 / 1.7
	192	251 / 9.9	803 / 31.6	858 / 31.7	928 / 36.5	1014 / 40.0	1661 / 65.4	938 / 37.0	1351 / 53.2	1961 / 77.2 *	44 / 1.7
CREW CAB	180	251 / 9.9	803 / 31.6	858 / 31.7	928 / 36.5	1014 / 40.0	1351 / 53.2	938 / 37.0	1351 / 53.2	1351 / 53.2	44 / 1.7
	204	251 / 9.9	803 / 31.6	858 / 31.7	928 / 36.5	1014 / 40.0	1961 / 77.2	938 / 37.0	1351 / 53.2	1961 / 77.2 *	44 / 1.7

Ford PRO

Body Builders Layout Book

SUPER DUTY

PICKUP (WIDE FRAME) FUEL TANK / EXHAUST / UREA / AUX BRACKET DIMENSIONS



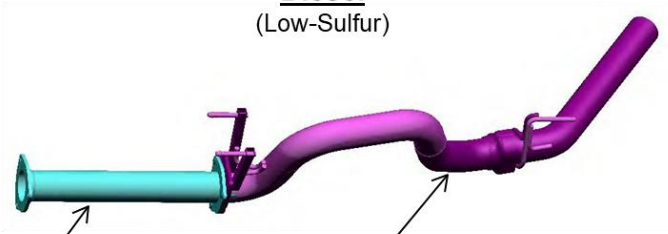
WHEELBASE	MODEL	FUEL TANK DIMENSIONS			EXHAUST SYSTEM DIMENSIONS			UREA TANK	AUX BRACKET
(in)	Pickup	F1 (mm / in.)	F2 (mm / in.)	F3 (mm / in.)	E1 (mm / in.)	E2 (mm / in.)	E3 (mm / in.)	U1 INBOARD MTD. (mm / in.)	Z1 (mm / In.)
142	REGULAR CAB	572 / 22.5	323 / 12.7	975 / 38.4	942 / 37.1	536 / 21.1	946 / 37.25	348 / 13.7	44 / 1.7
164	SUPER CAB	572 / 22.5	323 / 12.7	975 / 38.4	942 / 37.1	1110 / 43.7	946 / 37.25	348 / 13.7	44 / 1.7
176	CREW CAB	572 / 22.5	323 / 12.7	1676 / 65.4	942 / 37.1	1415 / 55.8	946 / 37.25	348 / 13.7	44 / 1.7

NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY

CHASSIS CAB (NARROW FRAME) – EXHAUST DETAILS / UREA TANK RELOCATION

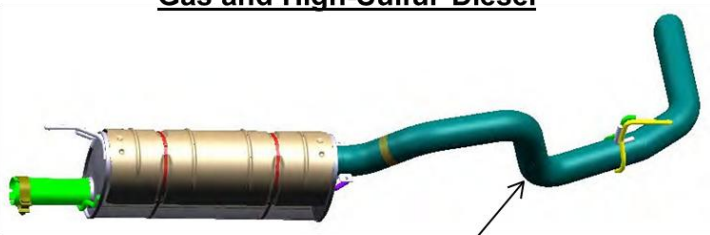
Diesel
(Low-Sulfur)



5A212 Extension Pipe
88.9 mm OD x 1.75 mm
Material: SS 409 per ASTM A240

5K214 Outlet Pipe
88.9 mm OD x 1.75 mm
Material: SS 409 per ASTM A463

Gas and High-Sulfur Diesel



5K214 Outlet Pipe
88.9 mm OD x 1.75 mm
Material: SS 409 per ASTM A463

For relocation of the Urea tank from the inboard location (between the frame rails) to the outboard location (outside passenger side frame rail):
The inboard and outboard DEF tank locations have different mounting hardware. Additionally, an extended wire harness jumper and extended heated DEF line have been released to facilitate tank relocation. The following tables contain both the service part numbers of the standard inboard position mounting hardware and the service parts required for an upfitter to relocate the DEF tank from the inboard to outboard position.
Vehicles equipped with the DEF tank mounted in the standard, inboard position will have the following hardware installed from factory:

Inboard DEF Tank Mounting Hardware		
Service Part Number	**Description**	**Quantity**
HC3Z-5J231-A	STRP TNK EXH A/TRTMT SOLU MTNG (Note: retain for use with outboard position)	2
HC3Z-5L212-C	BRKT ASY TNK EXH A/TRTMT SOLU	1
HC3Z-5L212-D	BRKT ASY TNK EXH A/TRTMT SOLU	1

The following service components are required for relocating the DEF Tank from the inboard location to the outboard location. They may be ordered through a Ford dealer:

Outboard DEF Tank Mounting Hardware		
Service Part Number	**Description**	**Quantity**
HC3Z-5L212-A	BRKT ASY TNK EXH A/TRTMT SOLU	1
HC3Z-5L212-B	BRKT ASY TNK EXH A/TRTMT SOLU	1
HC3Z-5C106-A	PLT ASY FR TO BDY SUPT	1
PC3Z-14A655-A	Electrical Jumper Harness*	1
HC3Z-5J249-T	Extended DEF line*	1
*Required parts specific to tank relocation		

Note: *The inside left frame rail (mid-ship) position is the factory default position with aft-of-axle fuel tank. If the mid-ship fuel tank or mid-ship and aft-of-axle tanks are ordered, the urea tank will be packaged on the outside right frame rail. There is no recommended tested position to relocate the urea tank when the mid-ship fuel tank is ordered.*

Refer to the workshop manual for tank removal and installation procedure.

Additional guidelines:

- After any modification on or near the urea supply line, inspect the entire length of the line from the urea tank to the exhaust injector. Look for areas that may have been impacted by jacking, hoisting, cutting, welding or repositioning of components.
- Verify that all (6) connectors related to the urea tank and fluid supply line are fully seated by using a push/click/pull method.
- Start vehicle and allow it to run for a minimum of 10 minutes. Inspect for any leaks. Check the instrument cluster for warning lights or messages related to the Diesel Exhaust Fluid System. If extensive troubleshooting is required, please contact your local authorized Ford Service Center.

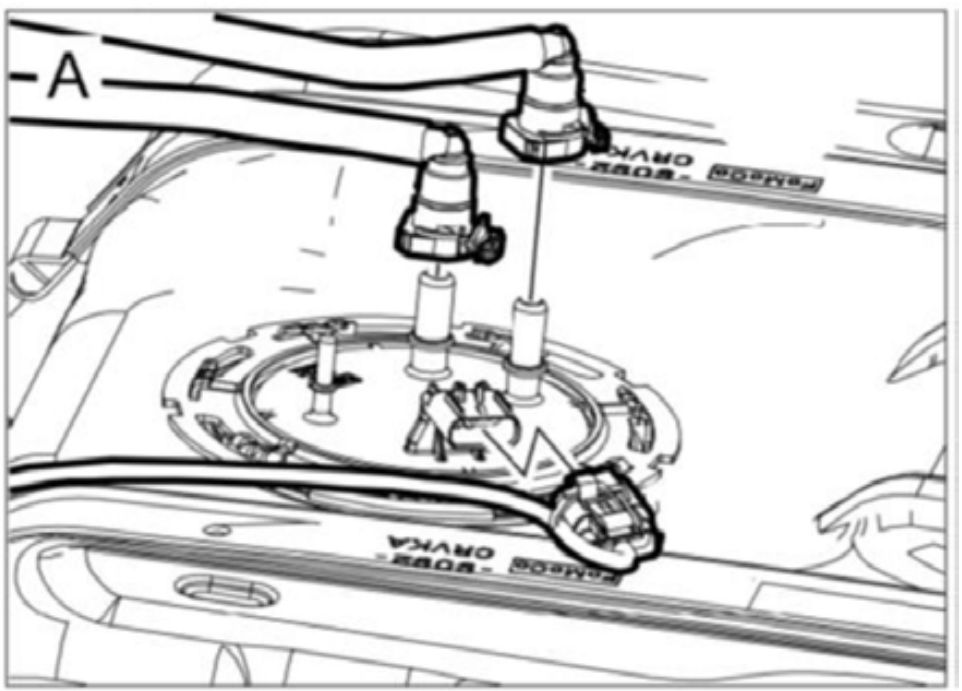
SUPER DUTY

AUXILIARY FUEL PORT CONNECTER KIT

To use the auxiliary fuel port on the F350-550 Chassis Cab aft-of-axle or mid-ship fuel tank, a service kit can be obtained from your local Ford dealership parts department.

Aux Fuel Port Service Kit Number: **9C2Z-9B210-A**

The kit includes a quick connector, a clamp and tag. Install this kit to allow installed equipment (such as a generator) to use fuel from the vehicle fuel tank.



All Super-Duty Chassis Cab fuel tanks (except the aft tank on dual-tank diesels) come equipped with an Auxiliary Fuel Port located in the fuel sender unit on the top of the fuel tank.

These Aux Fuel Ports can provide a fuel supply to upfitter-installed equipment such as generators. Aux Fuel Ports are not available on Super-Duty Pickups.

Chassis Cab Super-Duty F-Series mid-ship and aft-of-axle fuel tanks are equipped with an auxiliary fuel port in the fuel sender unit. The purpose is to provide a fuel supply for upfitter-installed accessories such as generators.

MODEL	Fuel Tank Capacity *	
	26.5 GALLON	40 GALLON
	REMAINING FUEL VOLUME (GALLONS) AT AUXILIARY FUEL TUBE SHUT-OFF	
F-Super-Duty (Gasoline)	3.4	5
F-Super-Duty (Diesel)	3.4	5

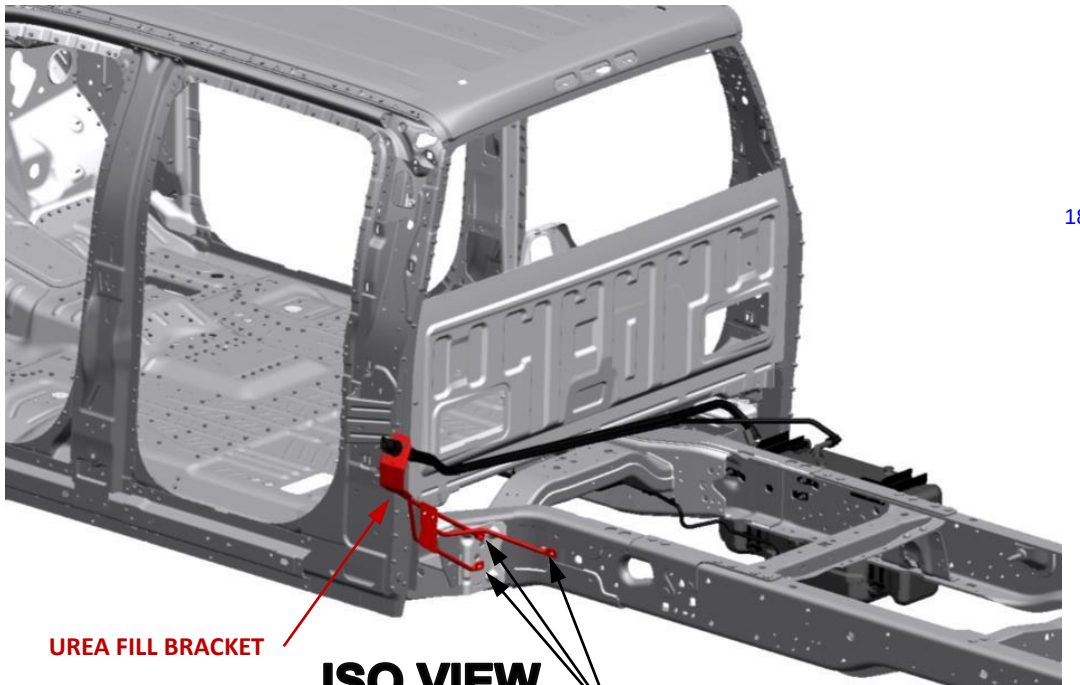
* Fuel volumes are estimated

Other parts that can be purchased separately:

VEHICLE	ENGINE	FUEL TANK	FUEL FILL KIT P/N
F-Super Duty			
Chassis Cab	Diesel	Midship	HC3Z-9B149-A
		Aft of axle	HC3Z-9B149-C
	Gas	Midship	HC3Z-9B149-B
		Aft of axle	HC3Z-9B149-D
Wide Frame Pickup	Diesel	Box delete	HC3Z-9B149-E
		Box removed	9C3Z-9B149-B
	Gas	Box delete	HC3Z-9B149-F
		Box removed	8C3Z-9B149-J

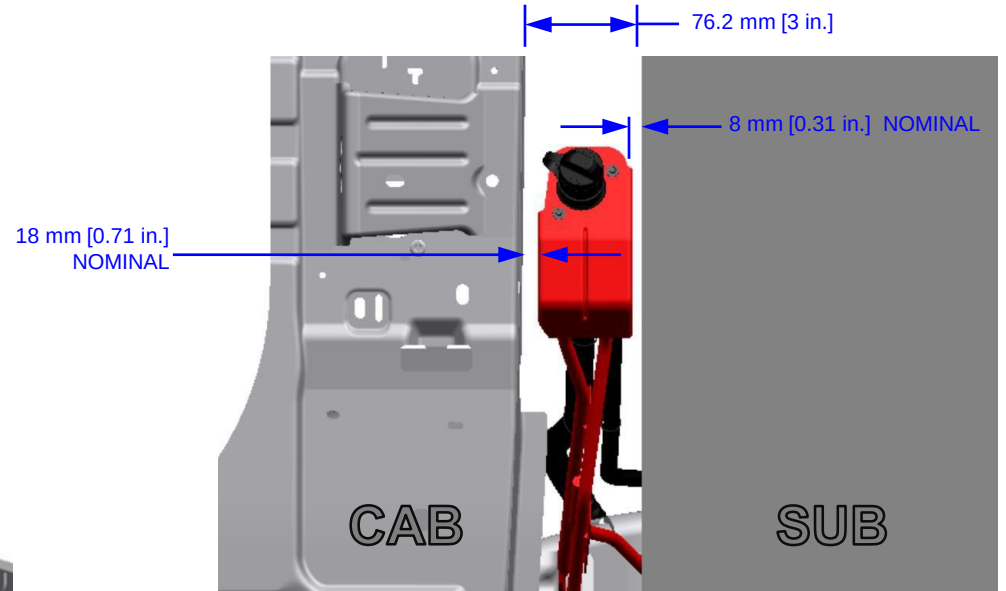
PART DESCRIPTION	SERVICE P/N
Support (unskirted body)	E0TZ-9040-A
Label – Unleaded Fuel	D702-9A095-A
Label – Diesel Fuel	E432-9A095-A

SUPER DUTY
CHASSIS CAB UREA FILL PIPE & BRACKET (DIESEL ENGINE)

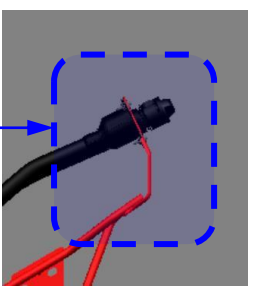


ISO VIEW

FASTENER TORQUE (3x)
27.5 +/- 4.2 Nm [20.3 +/- 3.1 lb.]



SIDE VIEW

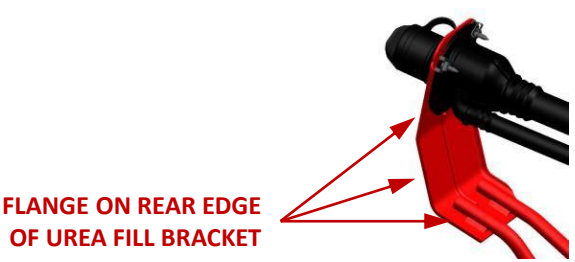


FRONT VIEW

CHASSIS CAB (NARROW FRAME)
- **60 & 84 CA WITH AFT-AXLE FUEL TANK**
- **ALL CA WITH MIDSHIP/DUAL FUEL TANK(S)**

Vehicles come with a complete Urea fill system from the factory.
- No re-mounting is required by the upfitter unless the provided system is incompatible with the SUB or a different Urea fill location is desired (see next page for alternative installation options).
- Additional support for hoses may be required to maintain continuous 2-degree downward slope.

NOTE: Due to variation in the Urea fill bracket location and position of the installed SUB, it is possible to have a small gap or physical contact between the Urea fill bracket and SUB.
- For close contact conditions, a rubber trim piece could be fit to the flange on the rear edge of the Urea fill bracket to prevent paint wear and minimize noise if contact is made during driving. An example of suitable trim: McMaster-Carr Part 8693K28. Adhesive may be required for adequate retention.
- For contact conditions, a UHMW Polyethylene film patch could be applied to the SUB to prevent paint wear due to relative movement.
- For contact conditions, the Urea fill bracket could be mechanically fastened to the SUB to prevent relative movement.

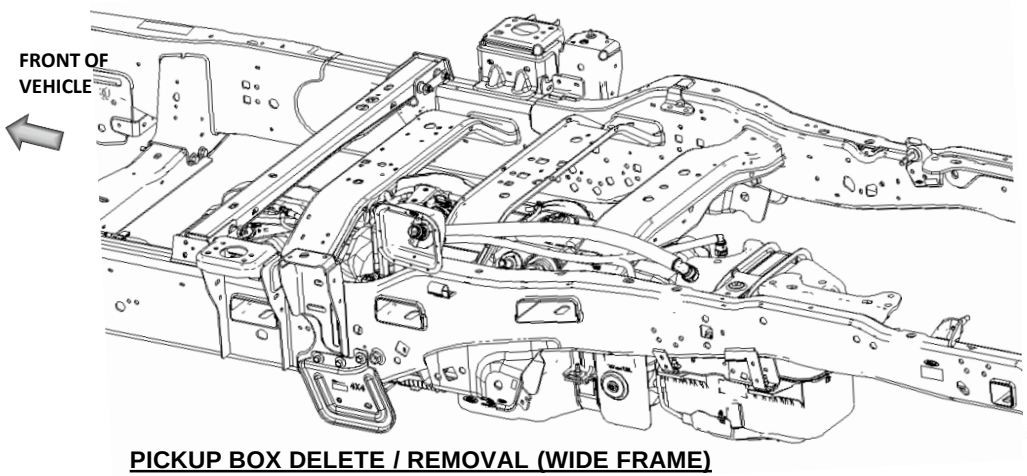


ISO VIEW

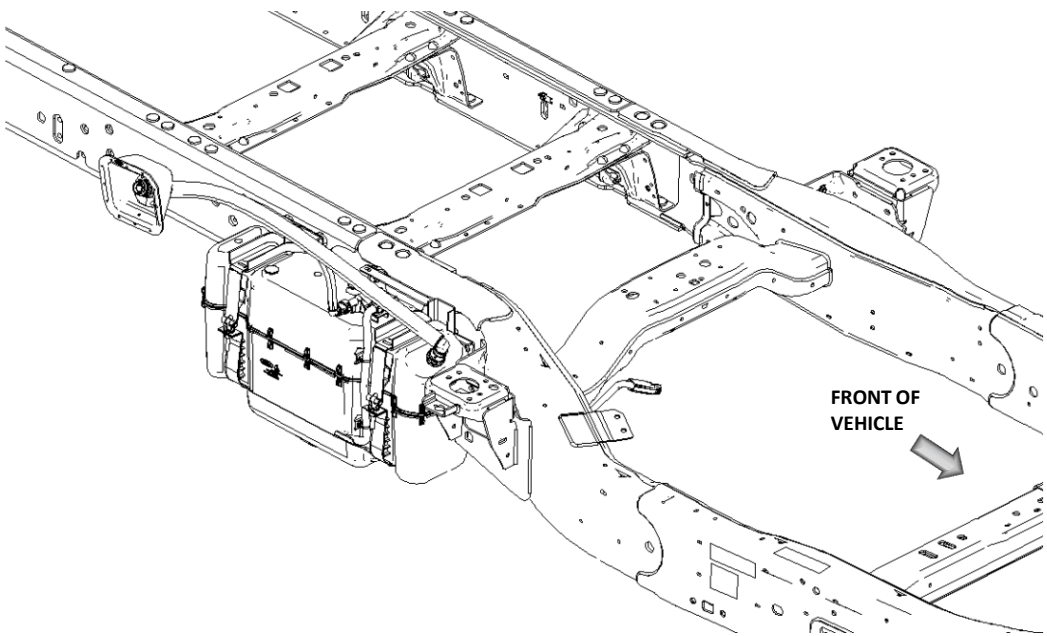
NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY

PICKUP BOX DELETE/REMOVAL & CHASSIS CAB UREA FILLER PIPE INSTALLATION (DIESEL ENGINE)

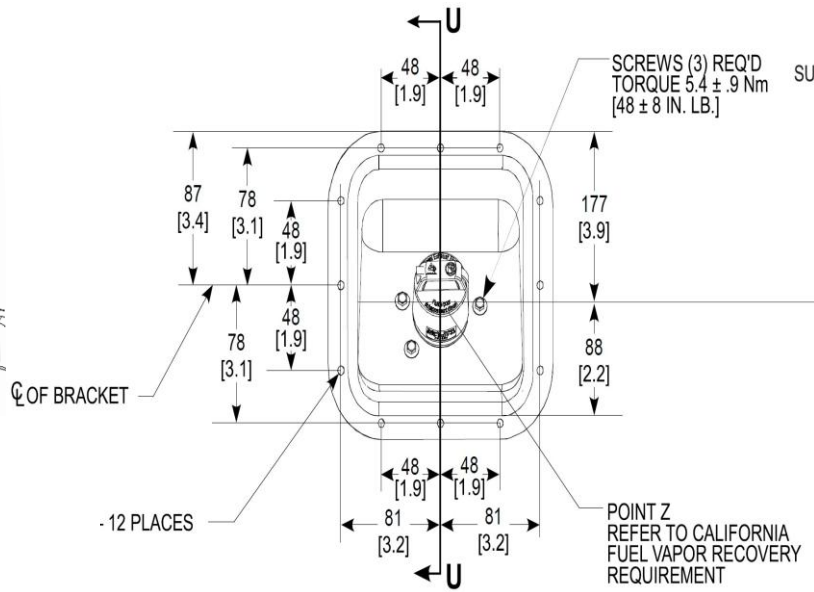


PICKUP BOX DELETE / REMOVAL (WIDE FRAME)
TYPICAL INSTALLATION

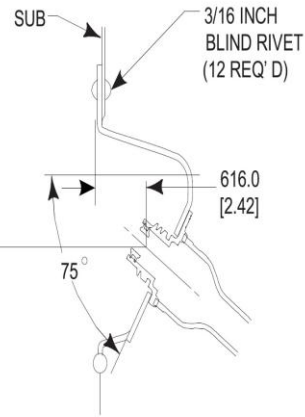


CHASSIS CAB (NARROW FRAME)
TYPICAL INSTALLATION FOR 108 & 120 CA WITH AFT-AXLE FUEL TANK
ALTERNATIVE INSTALLATION FOR 60 & 84 CA WITH AFT-AXLE FUEL TANK
ALTERNATIVE INSTALLATION FOR ALL CA WITH MIDSHIP/DUAL FUEL TANK(S)

VIEW P



SECTION U-U



NOTES:
▽ TORQUE ALL WORM GEAR DRIVEN HOSE CLAMPS TO 4.8 +/-0.8 NM [43 +-7 IN. LB]

* NOT SUPPLIED BY FORD MOTOR COMPANY

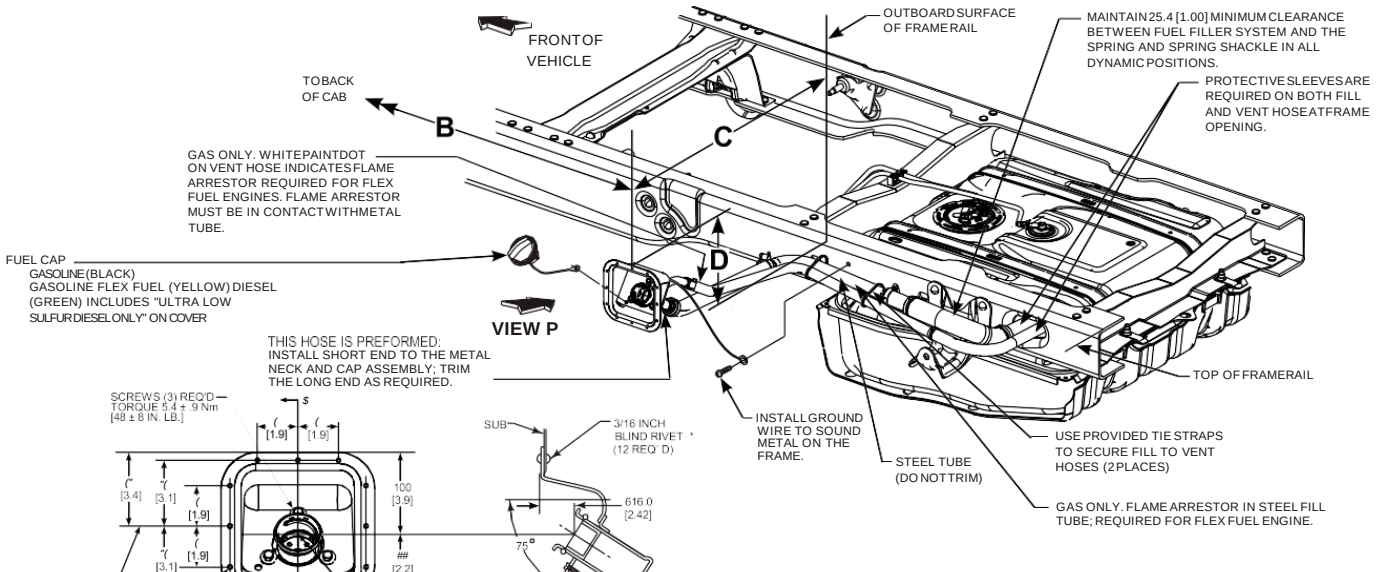
▽ CRITICAL CONTROL ITEM

- The completed Urea fill system must provide a 2-degree (minimum) continuous downward slope to the Urea tank (must not contain any sumps).
- Hoses should be trimmed for proper length
- Zip-tie or similar fasteners must be used to retain hoses within desired routing path and prevent sagging (which could cause spray or spit-back during normal filling operations).
- Hoses must not be kinked (no air/liquid flow restrictions).

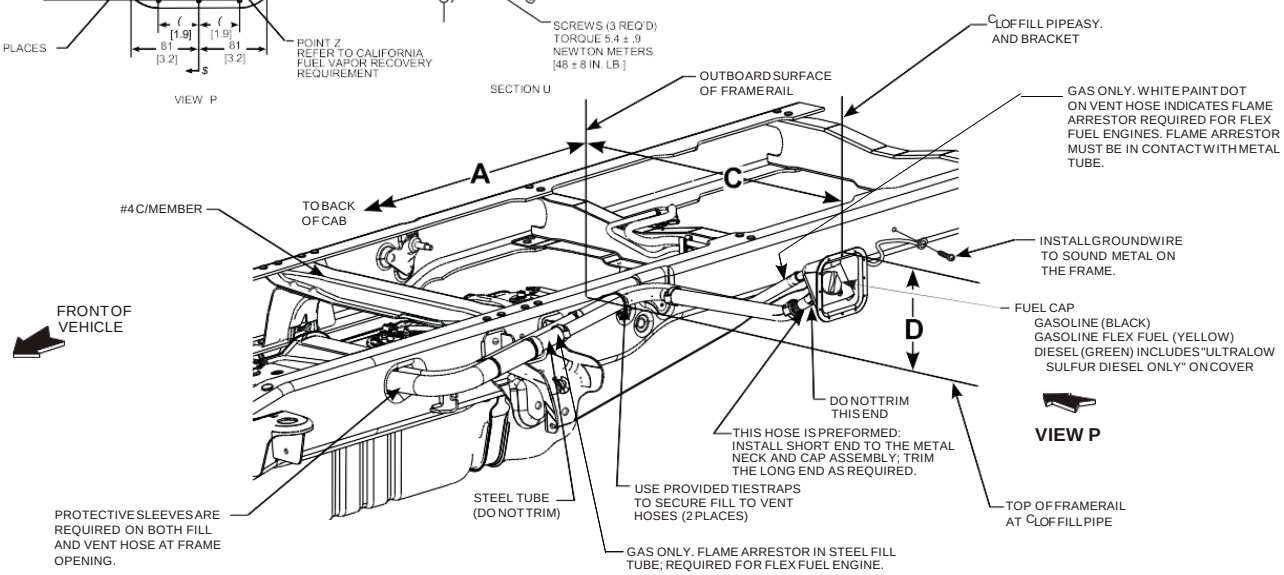
CHASSIS CABS WITHOUT UREA FILL BRACKET AND BOX
Remove and discard the Ford installed Urea system fill components (provided for shipping purposes only) except save and re-use the metal neck and cap assembly. Use the new hoses, pipes, scuff guards, tie wraps, and clamps provided in the dunnage kit for installation in the SUB.

Alternate installation on Chassis Cabs with Urea Fill Bracket and Pickup Box Removals: use service kit PC3Z-5K289-A and follow the instructions above.

CHASSIS CAB (NARROW FRAME) FUEL FILLER PIPE LOCATION


FRONT OF VEHICLE
TO BACK OF CAB
B
C
D
OUTBOARD SURFACE OF FRAME RAIL
MAINTAIN 25.4 [1.00] MINIMUM CLEARANCE BETWEEN FUEL FILLER SYSTEM AND THE SPRING AND SPRING SHACKLE IN ALL DYNAMIC POSITIONS.
PROTECTIVE SLEEVES ARE REQUIRED ON BOTH FILL AND VENT HOSE AT FRAME OPENING.
GAS ONLY. WHITE PAINT DOT ON VENT HOSE INDICATES FLAME ARRESTOR REQUIRED FOR FLEX FUEL ENGINES. FLAME ARRESTOR MUST BE IN CONTACT WITH METAL TUBE.
FUEL CAP
GASOLINE (BLACK)
GASOLINE FLEX FUEL (YELLOW) DIESEL (GREEN) INCLUDES "ULTRA LOW SULFUR DIESEL ONLY" ON COVER
VIEW P
THIS HOSE IS PREFORMED: INSTALL SHORT END TO THE METAL NECK AND CAP ASSEMBLY; TRIM THE LONG END AS REQUIRED.
TOP OF FRAME RAIL
INSTALL GROUND WIRE TO SOUND METAL ON THE FRAME.
STEEL TUBE (DO NOT TRIM)
USE PROVIDED TIE STRAPS TO SECURE FILL TO VENT HOSES (2 PLACES)
GAS ONLY. FLAME ARRESTOR IN STEEL FILL TUBE; REQUIRED FOR FLEX FUEL ENGINE.
SCREWS (3) REQ'D TORQUE 5.4 ± .9 Nm [48 ± 8 IN. LB.]
SUB
3/16 INCH BLIND RIVET (12 REQ'D)
616.0 [24.2]
75°
℄ OF BRACKET
HOLES – 12 PLACES
POINT Z REFER TO CALIFORNIA FUEL VAPOR RECOVERY REQUIREMENT
VIEW P
SCREWS (3 REQ'D) TORQUE 5.4 ± .9 NEWTON METERS [48 ± 8 IN. LB.]

AFT OF AXLE FILL SYSTEM


SECTION U
℄ OF FILL PIPE EASY. AND BRACKET
OUTBOARD SURFACE OF FRAME RAIL
GAS ONLY. WHITE PAINT DOT ON VENT HOSE INDICATES FLAME ARRESTOR REQUIRED FOR FLEX FUEL ENGINES. FLAME ARRESTOR MUST BE IN CONTACT WITH METAL TUBE.
A
C
#4 C/MEMBER
TO BACK OF CAB
INSTALL GROUND WIRE TO SOUND METAL ON THE FRAME.
FUEL CAP
GASOLINE (BLACK)
GASOLINE FLEX FUEL (YELLOW)
DIESEL (GREEN) INCLUDES "ULTRA LOW SULFUR DIESEL ONLY" ON COVER
FRONT OF VEHICLE
D
DO NOT TRIM THIS END
VIEW P
THIS HOSE IS PREFORMED: INSTALL SHORT END TO THE METAL NECK AND CAP ASSEMBLY; TRIM THE LONG END AS REQUIRED.
PROTECTIVE SLEEVES ARE REQUIRED ON BOTH FILL AND VENT HOSE AT FRAME OPENING.
STEEL TUBE (DO NOT TRIM)
USE PROVIDED TIE STRAPS TO SECURE FILL TO VENT HOSES (2 PLACES)
TOP OF FRAME RAIL AT ℄ OF FILL PIPE
GAS ONLY. FLAME ARRESTOR IN STEEL FILL TUBE; REQUIRED FOR FLEX FUEL ENGINE.

MIDSHIP FUEL FILL SYSTEM (OPTIONAL ON CHASSIS CAB)

		(CA) BACK OF CAB TO CENTERLINE OF REAR AXLE			
		60 inch CA	84 inch CA	108 inch CA	120 inch CA
		WHEELBASE			
Regular Cab Super Cab Crew Cab		3691mm [145.3] 4265mm [167.9] 4565mm [179.8]	4301mm [169.3] 4875mm [191.9] 5175mm [203.8]	4911mm [193.3]	5215mm [205.3]
▽A	MIN	864mm [34.0]	1473mm [68.0]	2083mm [82.0]	2388mm [94.0]
	MAX	1029mm [40.5]	1638mm [64.5]	2248mm [88.5]	2553mm [100.5]
▽B	MIN	1981mm [78.0]	2591mm [102.0]	3200mm [126.0]	3505mm [138.0]
	MAX	2159mm [85.0]	2769mm [109.0]	3378mm [133.0]	3683mm [145.0]
▽C	MIN	584mm [23.0]	584mm [23.0]	584mm [23.0]	584mm [23.0]
	MAX	787mm [31.0]	787mm [31.0]	787mm [31.0]	787mm [31.0]
▽D	MIN *	267mm [10.5]	267mm [10.5]	267mm [10.5]	267mm [10.5]
	MAX	343mm [13.5]	343mm [13.5]	343mm [13.5]	343mm [13.5]

* Preferred minimum for diesel applications is 292mm [11.5in]

REFERENCE ONLY - Please see the Incomplete Vehicle Manual

NOTES:

▽ TORQUE ALL WORM GEAR DRIVEN HOSE CLAMPS TO 4.8 +/-0.8 NM [43 +-7 IN. LB]

* NOT SUPPLIED BY FORD MOTOR COMPANY

▽ CRITICAL CONTROL ITEM

Remove and discard the Ford installed fuel system components (provided for shipping purposes only) except save and reuse the metal neck and cap assembly.

Use the new hoses, pipes, scuff guards, tie wraps, and clamps provided in the dunnage kit.

The completed fuel fill system must provide a 4-degree minimum continuous downward slope to the fuel tank. Additional support may be required to prevent hose sagging which could cause spray or spit-back during normal fueling operations.

Do not extend the fuel fill system outboard of the second unit body.

The installation of Tube Extension F81A-9B149-HA will permit the location aft-of-axle fuel fill housing to be no further rearward than the centerline of the fill hose as it passes through the frame.

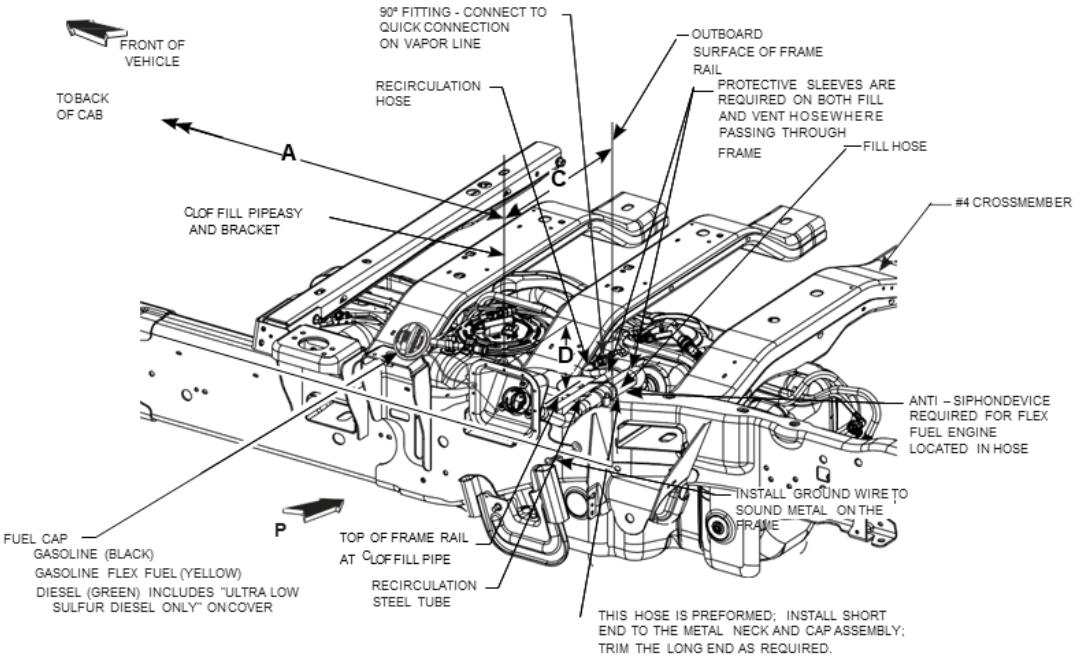
NOTE- [ ] DIMENSION ARE INCHES

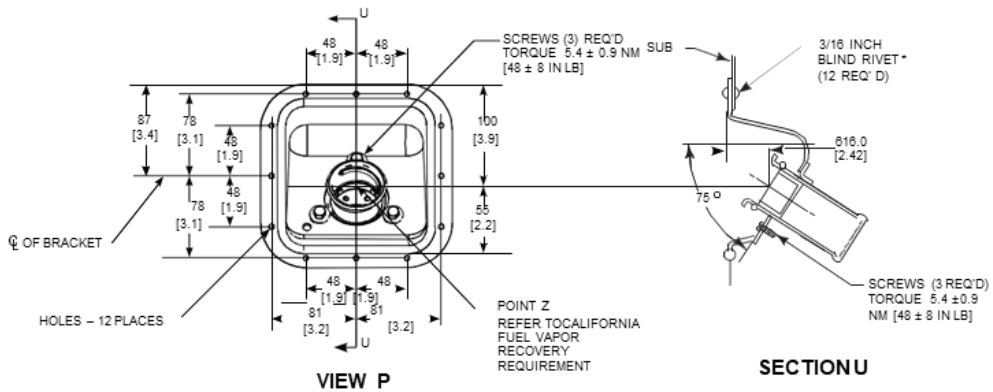
Ford PRO

Body Builders Layout Book

SUPER DUTY

PICKUP (WIDE FRAME) FUEL FILLER PIPE INSTALLATION


FRONT OF VEHICLE
TO BACK OF CAB
A
90° FITTING - CONNECT TO QUICK CONNECTION ON VAPOR LINE
RECIRCULATION HOSE
OUTBOARD SURFACE OF FRAME RAIL
PROTECTIVE SLEEVES ARE REQUIRED ON BOTH FILL AND VENT HOSE WHERE PASSING THROUGH FRAME
FILL HOSE
#4 CROSSMEMBER
℄ OF FILL PIPE EASY AND BRACKET
C
D
ANTI – SIPHON DEVICE REQUIRED FOR FLEX FUEL ENGINE LOCATED IN HOSE
INSTALL GROUND WIRE TO SOUND METAL ON THE FRAME
P
FUEL CAP
GASOLINE (BLACK)
GASOLINE FLEX FUEL (YELLOW)
DIESEL (GREEN) INCLUDES "ULTRA LOW SULFUR DIESEL ONLY" ON COVER
TOP OF FRAME RAIL AT ℄ OF FILL PIPE
RECIRCULATION STEEL TUBE
THIS HOSE IS PREFORMED; INSTALL SHORT END TO THE METAL NECK AND CAP ASSEMBLY; TRIM THE LONG END AS REQUIRED.



MODEL		WHEELBASE (56 Inch CA)
Regular Cab		3596 [141.6]
Super Cab		4170 [164.2]
Crew Cab		4470 [176.0]
FUEL FILLER CUP LOCATION		
▽ **A**	**MIN**	620 [24.4]
	MAX	932 [36.7]
▽ **C**	**MIN**	540 [21.3]
	MAX	743 [29.2]
▽ **D**	**MIN**	267 [10.5]
	MAX	343 [13.5]

CA = Dimension from back of cab to ℄ of rear axle

NOTE: FOR REFERENCE ONLY. PLEASE SEE THE INCOMPLETE VEHICLE MANUAL

NOTES:

▽ TORQUE ALL WORM GEAR DRIVEN HOSE CLAMPS TO 4.8 +/-0.8 NM [43 +-7 IN. LB]

* NOT SUPPLIED BY FORD MOTOR COMPANY

▽ CRITICAL CONTROL ITEM

For Pickup Box Delete: Remove and discard the Ford installed fuel system components (provided for shipping purposes only) except save and reuse the metal neck and cap assembly. Use the new hoses, pipes, scuff guards, tie wraps, and clamps provided in the dunnage kit.

For Pickup Box Removal: Purchase fuel fill conversion kit HC3Z-9B149-E for Diesel or LC3Z-9B149-C for Gas

The completed fuel fill system must provide a 4-degree minimum continuous downward slope to the fuel tank. Additional support may be required to prevent hose sagging which could cause spray or spit-back during normal fueling operations.

Do not extend the fuel fill system outboard of the second unit body.

The Carbon Canister Fresh Air Tube should be secured in a clean location, there are no specific requirements for location or orientation.

Body Builders Layout Book

SUPER DUTY

CENTER OF GRAVITY REFERENCE INFORMATION

PASSENGER LOAD (1)	
GVWR	P (kg [lb.])
10,000 lb. and Below	181 [400]
Over 10,000 lb.	227 [500]

PASSENGER LOAD CG LOCATION		
CONFIGURATION	CG_{vp} (2) (mm [in])	CG_{hp} (3) (mm [in])
4X2 DRIVE	1024 [40.3]	1572 [61.9]
4X4 DRIVE	1113 [43.8]	1572 [61.9]

CHASSIS CAB VERTICAL CG LOCATION (CG_{vc}) (5) (mm [in])		
CONFIGURATION	GAS	DIESEL
F-350 4x2	698 [27.5]	713 [28.1]
F-350 4x4	727 [28.6]	742 [29.2]
F-450	731 [28.8]	746 [29.4]
F-550	735 [28.9]	750 [29.5]
F-600	740 [29.1]	755 [29.7]

PAYLOAD CG LOCATION		
CONFIGURATION	WHEELBASE (in)	CG_{hl} (4) (mm [in])
REGULAR CAB	141.6	3480 [137]
REGULAR CAB	145.3	3531 [139]
REGULAR CAB	169.3	3835 [151]
REGULAR CAB	193.3	4140 [163]
REGULAR CAB	205.3	4293 [169]
SUPER CAB	164.1	4039 [159]
SUPER CAB	167.9	4089 [161]
SUPER CAB	191.9	4394 [173]
CREW CAB	176	4293 [169]
CREW CAB	179.8	4343 [171]
CREW CAB	203.8	4724 [186]

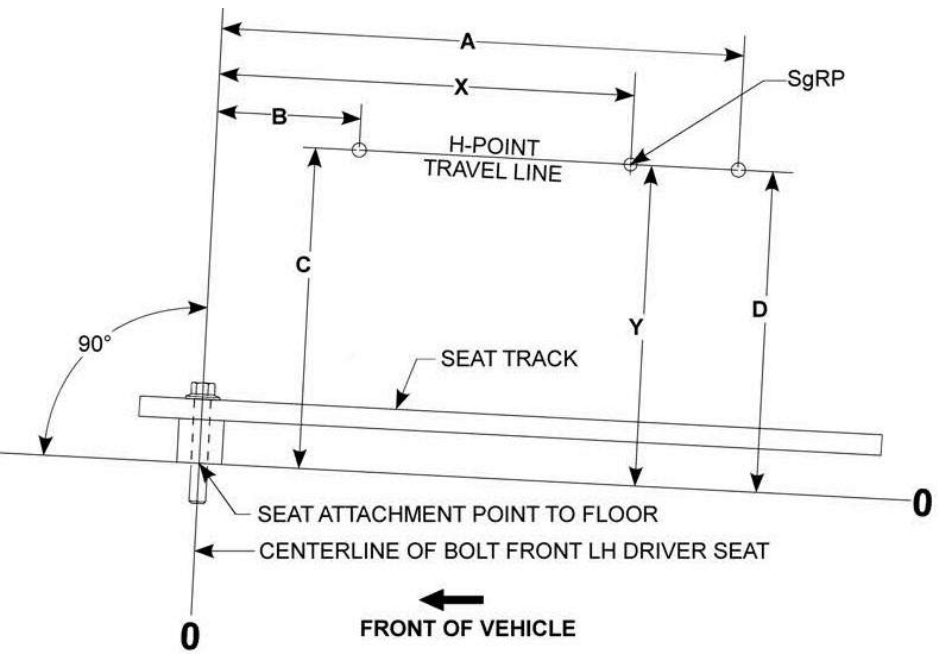
PICKUP BOX DELETE AND REMOVAL VERTICAL CG LOCATION (6)					
				CG_{vc} (mm [in])	
SERIES	CAB	WB (CA) (in)	DRIVE	GAS	DIESEL
F-250	REG	141.5 (56)	4X2	702 [27.7]	709 [27.9]
			4X4	755 [29.7]	762 [30.0]
	SUPER	147.9 (40)	4X2	717 [28.2]	724 [28.5]
			4X4	769 [30.3]	776 [30.6]
		164.1 (56)	4X2	709 [27.9]	716 [28.2]
			4X4	761 [30.0]	768 [30.2]
	CREW	159.7 (40)	4X2	712 [28.0]	719 [28.3]
			4X4	764 [30.1]	771 [30.4]
			TREMOR	795 [31.3]	803 [31.6]
		175.9 (56)	4X2	704 [27.7]	711 [28.0]
			4X4	756 [29.8]	763 [30.0]
F-350 SRW	REG	141.5 (56)	4X2	719 [28.3]	726 [28.6]
			4X4	771 [30.4]	778 [30.6]
	SUPER	147.9 (40)	4X2	733 [28.9]	740 [29.1]
			4X4	785 [30.9]	792 [31.2]
		164.1 (56)	4X2	725 [28.5]	732 [28.8]
			4X4	777 [30.6]	784 [30.9]
	CREW	159.7 (40)	4X2	728 [28.7]	735 [28.9]
			4X4	780 [30.7]	788 [31.0]
			TREMOR	812 [32.0]	819 [32.2]
		175.9 (56)	4X2	720 [28.4]	727 [28.6]
			4X4	772 [30.4]	779 [30.7]
F-350 DRW	REG	141.5 (56)	4X2	676 [26.6]	683 [26.9]
			4X4	728 [28.7]	735 [28.9]
	SUPER	164.1 (56)	4X2	682 [26.9]	689 [27.1]
			4X4	734 [28.9]	741 [29.2]
	CREW	175.9 (56)	4X2	677 [26.7]	684 [26.9]
			4X4	730 [28.7]	737 [29.0]

NOTES:

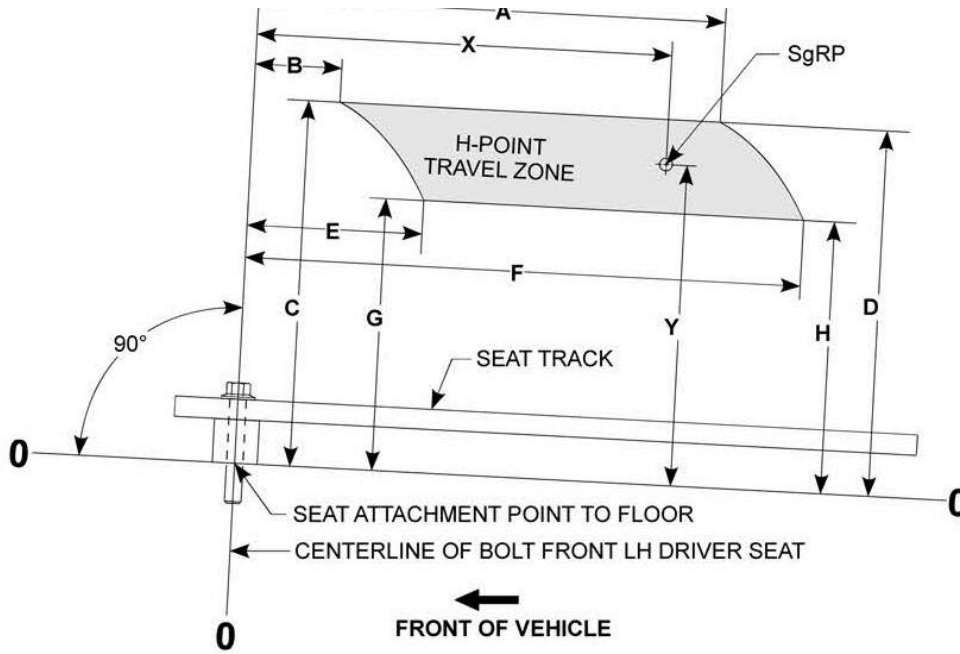
1. P – Passenger Load as defined in FMVSS 105
2. CG_{vp} – Vertical CG location of Passenger Load as measured from the Ground
3. CG_{hp} – Horizontal CG location of Passenger Load as measured from the Center of the Front Wheel
4. CG_{hl} – Horizontal CG location estimate (midpoint of cargo area), as measured from the Center of the Front Wheel
5. Chassis Cab Vertical CG location Notes:
   a. CG_{vc} – Vertical CG location of Chassis as measured from the Ground
   b. Add 4mm [0.2 in] for chassis with Low Deflection Spacer Option
   c. Worst case (highest value) given for each grouping. If further refinement is necessary, use the following formula for Chassis Cabs in mm: CG_{vc} = 517 + 0.324(F), +15 for 6.7L Diesel, +4 for Low Deflection Spacer, where F is the "Height at Front Axle" value in mm (provided elsewhere in this BBLB) for the specific chassis cab configuration you are interested in
   d. All values should be considered estimates, if calculated CG values for the completed vehicle are close to limits stated in the applicable IVM, Ford recommends verification of CG by physical measurement of a completed vehicle
6. Pickup Box Delete and Removal Vertical CG location Notes:
   a. CG_{vc} – Vertical CG location of Chassis as measured from the Ground
   b. Values provided are for Box Delete models or Pickups with box and rear bumper removed. To calculate CG_{vc} for complete pickups, add 13mm [0.5 in]
   c. All values should be considered estimates, if calculated CG values for the completed vehicle are close to limits stated in the applicable IVM or Box Removal BBLB, Ford recommends verification of CG by physical measurement of a completed vehicle

NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY
SEAT TRAVEL / H-POINT LOCATION



2-WAY SEATS



MULTI-WAY SEATS

SEAT TRAVEL DATA										
Seat Model	Seat Dimensions								SgRP Location	
	A	B	C	D	E	F	G	H	X	Y
2-Way Seat	393 [15.5]	138 [5.4]	318 [12.5]	307 [12.0]	—	—	—	—	317 [12.5]	311 [12.2]
8-Way Seat	354 [13.9]	98 [3.9]	350 [13.8]	339 [13.3]	158 [6.2]	413 [16.3]	287 [11.3]	276 [10.9]	317 [12.5]	311 [12.2]
10-Way Seat	354 [13.9]	98 [3.9]	350 [13.8]	339 [13.3]	158 [6.2]	413 [16.3]	287 [11.3]	276 [10.9]	317 [12.5]	311 [12.2]
Seat Track Angle To Top Of Frame = 2.5°										

NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY
SECOND UNIT BODY (SUB) MOUNTING GUIDELINES

MOUNTING TECHNIQUES FOR CHASSIS CAB (NARROW FRAME)

TECHNIQUE #1 – Shear Plates w/Longitudinal Structure
DO NOT WELD SHEAR PLATES TO OEM FRAME

- **Front Shear Plate Attachment:** Use two bolts, nuts, and washers in the OEM frame, one bolts, nut and washer with a ¼-inch equivalent weld bead around three sides of the shear plate and the SUB structure, skip-welded at the shear plate corners. If front shear plate is not welded to the SUB structure two bolts should be used instead of one. **SEE FIGURE A**

- **Rear Shear Plate Attachment:** Use three bolts, nuts, and washers in the OEM frame, one bolt, nut and washer with a ¼-inch equivalent weld bead around three sides of the shear plate and the SUB structure, skip-welded at the shear plate corners. If rear shear plate is not welded to the SUB structure two bolts should be used instead of one. **SEE FIGURE A**

TECHNIQUE #2 – Shear Plates w/Cross-Frame
DO NOT WELD SHEAR PLATES TO OEM FRAME

- **Front Shear Plate Attachment:** Use two bolts, nuts, and washers in the OEM frame, two bolts, nuts, and washers in the SUB structure. **SEE FIGURE B**
- **Rear Shear Plate Attachment: U**se three bolts, nuts, and washers in the OEM frame, two bolts, nuts, and washers in the SUB structure. **SEE FIGURE B**

NOTES for TECHNIQUE #1 & TECHNIQUE #2:

- A spacer between the OEM frame and SUB structure should be used and secured in such a manner as to maintain retention during installation and operational use. The spacer should have a slight taper which starts at the front of the SUB structure. **SEE FIGURE C**
- Front Shear Plates should be angled forward approximately 45 to 60 degrees from the horizontal. Front Shear Plates should be a sufficient distance from the front of the SUB to allow for frame flexing, i.e. Front Shear Plates should be placed behind the tapered section of the spacer.
- U-bolts must be installed every 2-3 feet between the front and rear shear plates.
- Vertical spacers must be used between the upper and lower frame flanges at each U-bolt to prevent collapse of the flanges. Do not notch the frame flanges to make U-bolt fit. **SEE FIGURE C**
- U-bolts or attaching hardware should not contact fuel, brake or electrical system components . A shear plate should be utilized if there is insufficient space for a U-bolt to be installed between the frame and fuel tank.
- All threaded fasteners (including U-Bolts) must be either 5/8" Diameter Grade 8, or M16 Property Class 10.9 for metric bolts and M16 Property Class 10 for metric nuts.
- Fastener Torques: 60-65 ft-lb for 5/8" fasteners, 200 +/- 30Nm for M16 fasteners.
- Direct the threaded end of the bolts away from any fuel, brake or electrical system components.
- U-Bolt torque should be checked every six months.

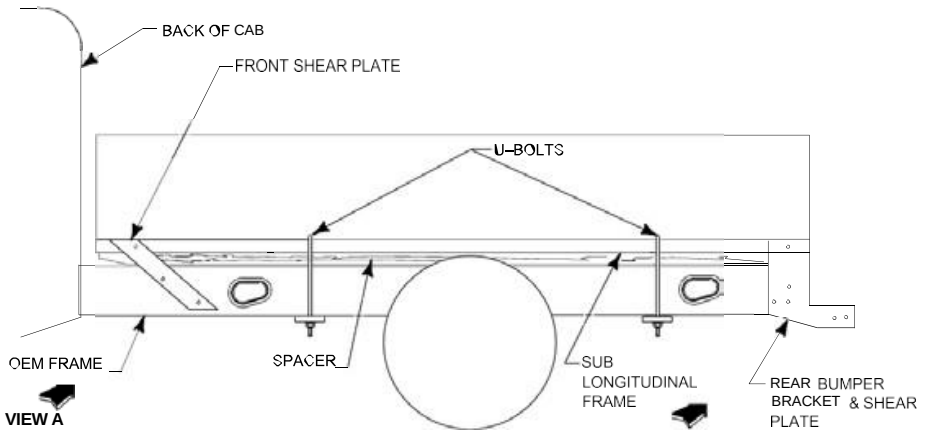
IMPORTANT

SUBs for those customers whose vocations are in aerial buckets, cranes, severe off-road mining operations, roll back wreckers and roll-off dump second unit bodies with large bending or torsional moments should only be incorporated on F450, F550, or F600 Chassis incomplete vehicles.

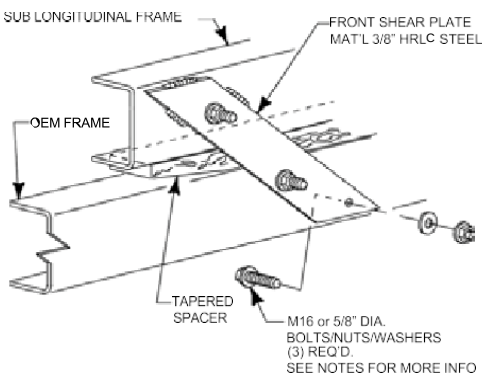
The final stage manufacturer has the responsibility to certify that the completed vehicle conforms to all applicable Federal Motor Vehicle Safety Standards. The Incomplete Vehicle Manual, not these recommendations/guidelines, is intended to provide representations concerning the extent that compliance is determined by the design of the incomplete vehicle and prescribe conditions upon which these representations may depend.

SUPER DUTY

SECOND UNIT BODY (SUB) MOUNTING GUIDELINES (CONT)



ATTACHMENT ARRANGEMENT WITH LONGITUDINAL SUB FRAME

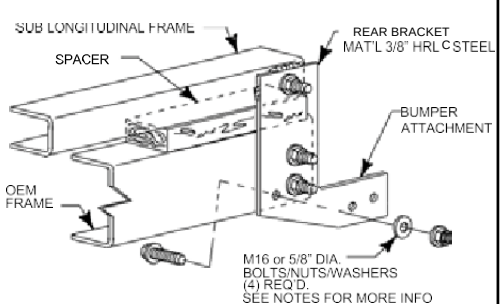

SUB LONGITUDINAL FRAME
FRONT SHEAR PLATE MAT'L 3/8" HRLC STEEL
OEM FRAME
TAPERED SPACER
M16 or 5/8" DIA. BOLTS/NUTS/WASHERS (3) REQ'D. SEE NOTES FOR MORE INFO

DRAWING DEPICTS SUB LONGITUDINAL FRAME WITH ONE BOLT AND 1/4" WELD BEAD AROUND THE PERIMETER OF THE SHEAR PLATE.

IF THE SHEAR PLATE IS NOT WELDED ON THE SUB LONGITUDINAL FRAME, TWO BOLTS WOULD BE NECESSARY TO ATTACH THE SHEAR PLATE TO THE LONGITUDINAL FRAME.

VIEW A

LEFT FRONT SHEAR PLATE (SUB LONGITUDINAL FRAME)
RIGHT SHEAR PLATE IS A MIRROR IMAGE.


SUB LONGITUDINAL FRAME
SPACER
REAR BRACKET MAT'L 3/8" HRLC STEEL
BUMPER ATTACHMENT
OEM FRAME
M16 or 5/8" DIA. BOLTS/NUTS/WASHERS (4) REQ'D. SEE NOTES FOR MORE INFO

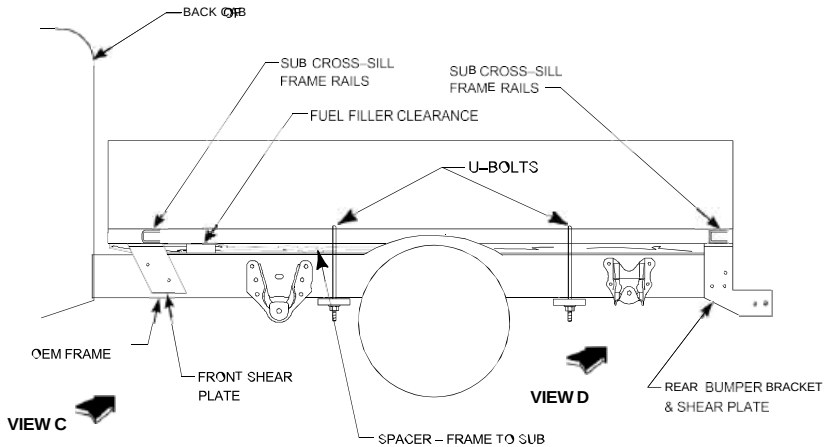
DRAWING DEPICTS SUB LONGITUDINAL FRAME WITH ONE BOLT AND 1/4" WELD BEAD AROUND THE PERIMETER OF THE SHEAR PLATE

IF REAR BRACKET AND SUB FRAME ARE NOT WELDED, TWO BOLTS WILL BE NECESSARY TO ATTACH REAR BRACKET TO SUB FRAME. THREE BOLTS/NUTS/WASHERS ARE NEEDED TO ATTACH THE REAR BRACKET TO OEM FRAME.

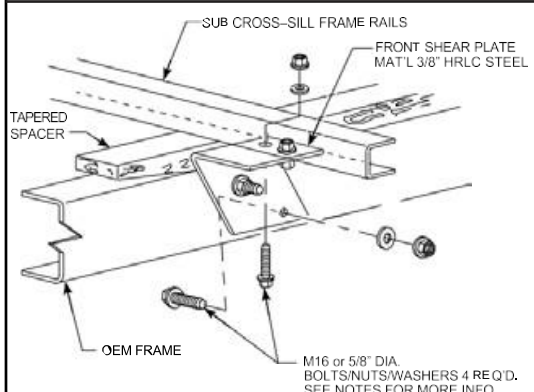
VIEW B

LEFT REAR BRACKET (SUB LONGITUDINAL FRAME) RIGHT REAR BRACKET IS A MIRROR IMAGE.

FIGURE A - TECHNIQUE #1
SHEAR PLATES W/LONGITUDINAL SUB STRUCTURE

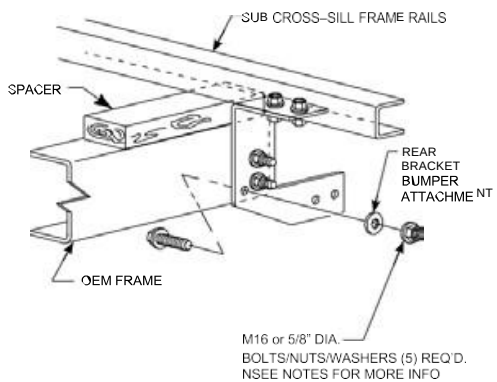


ATTACHMENT ARRANGEMENT WITH CROSS-SILL SUB FRAME RAILS


SUB CROSS-SILL FRAME RAILS
FRONT SHEAR PLATE MAT'L 3/8" HRLC STEEL
TAPERED SPACER
OEM FRAME
M16 or 5/8" DIA. BOLTS/NUTS/WASHERS 4 REQ'D. SEE NOTES FOR MORE INFO

VIEW C

LEFT FRONT SHEAR PLATE (SUB CROSS-SILL FRAME)
RIGHT SHEAR PLATE IS A MIRROR IMAGE


SUB CROSS-SILL FRAME RAILS
SPACER
REAR BRACKET BUMPER ATTACHMENT
OEM FRAME
M16 or 5/8" DIA. BOLTS/NUTS/WASHERS (5) REQ'D. NSEE NOTES FOR MORE INFO

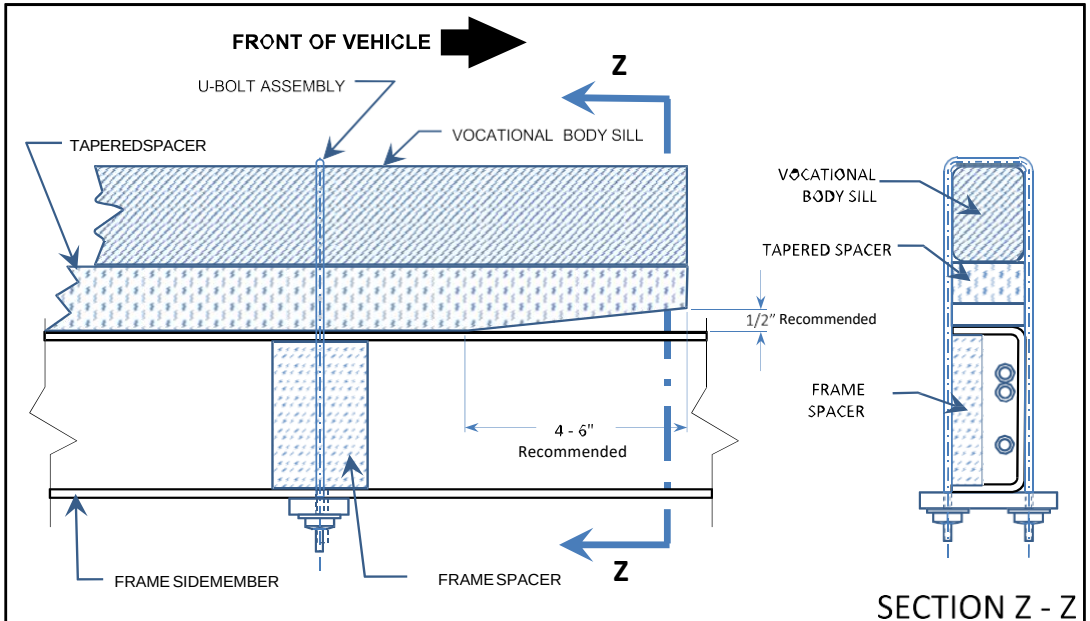
VIEW D

LEFT REAR BRACKET IS (SUB CROSS-SILL FRAME)
RIGHT REAR BRACKET IS A MIRROR IMAGE.

FIGURE B - TECHNIQUE #2
SHEAR PLATES W/LATERAL SUB STRUCTURE

SUPER DUTY

SECOND UNIT BODY (SUB) MOUNTING GUIDELINES (CONT)



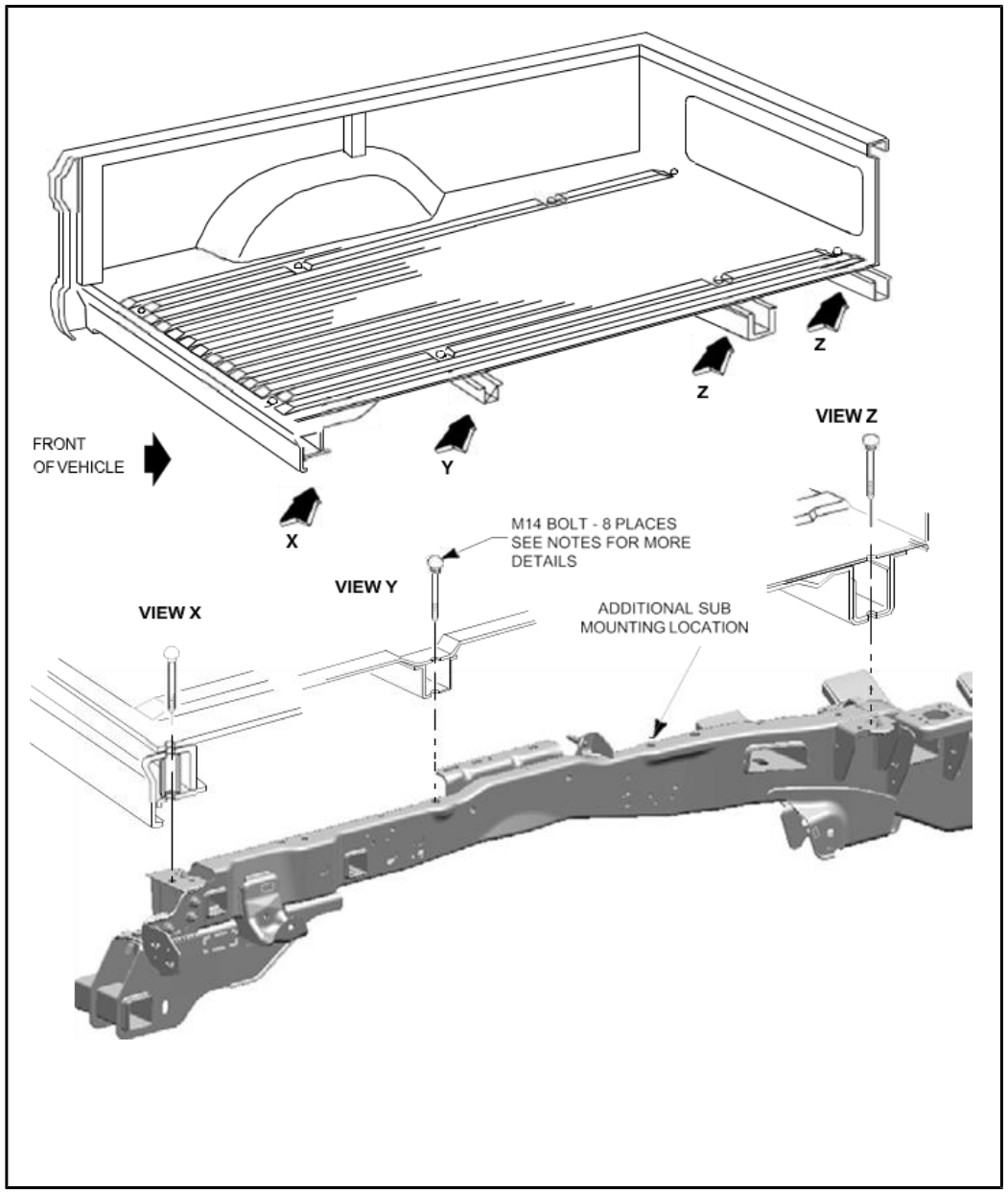
TYPICAL INSTALLATION
(VIEW SHOWING INBOARD SIDE RAIL)

Where wrap-around body attachments (such as U-Bolts) are used, the frame side members must have flange reinforcement spacers to avoid flange damage when full torque is applied to the attaching bolts. Spacers are recommended and must be cut out to clear brake-lines, fuel lines, wiring, etc. If metal spacers are used, no welding to the frame side members is permitted. Tapered spacers between the vocational-body sill and the frame side members flanges are recommended. Recommended taper is ½-inch at the frontend, diminishing to the contact 4 to 6 inches rearward. (See sketch for typical installations)

FIGURE C - CHASSIS CAB SUB-MOUNTING SPACER

SUPER DUTY

SECOND UNIT BODY (SUB) MOUNTING GUIDELINES (CONT)



FIGURED – TOP-BOLTING
SUB-Mounting for Pickup Box Removal

MOUNTING TECHNIQUES FOR PICK-UP BOX REMOVAL
(Wide Frame) w/56" CA.

TOP BOLTING: This technique uses the exiting pickup box mounting holes/nuts to attach a SUB weighing 1800 kg (3960 lb.) or less. M14 PC10.9 bolts must be used in conjunction with the installed nuts in all 8 mounting locations provided. Torque for M14 fasteners is 133 +/- 20 N-m. SEE FIGURE D

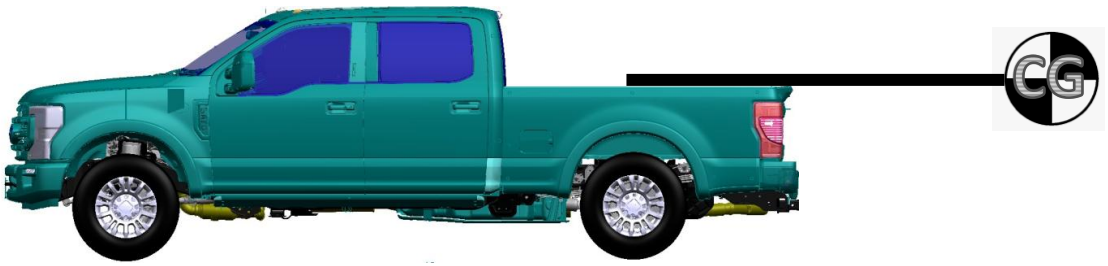
NOTE:
If desired, the M14 metric nuts that come on the frame may be removed and replaced with 5/8" or other SAE sized nuts. In this case, it is the responsibility of the Final Stage Manufacturer to assess the structural integrity of the system based on the type and size of fasteners chosen, and to develop an appropriate torque specification.

IMPORTANT
THE FINAL STAGE MANUFACTURER HAS THE RESPONSIBILITY TO CERTIFY THAT THE COMPLETED VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS (FMVSS). THE INCOMPLETE VEHICLE MANUAL, NOT THESE RECOMMENDATIONS/GUIDELINES, IS INTENDED TO PROVIDE REPRESENTATIONS CONCERNING THE EXTENT THAT COMPLIANCE IS DETERMINED BY THE DESIGN OF THE INCOMPLETE VEHICLE AND PRESCRIBE CONDITIONS UPON WHICH THESE REPRESENTATIONS MAY DEPEND.

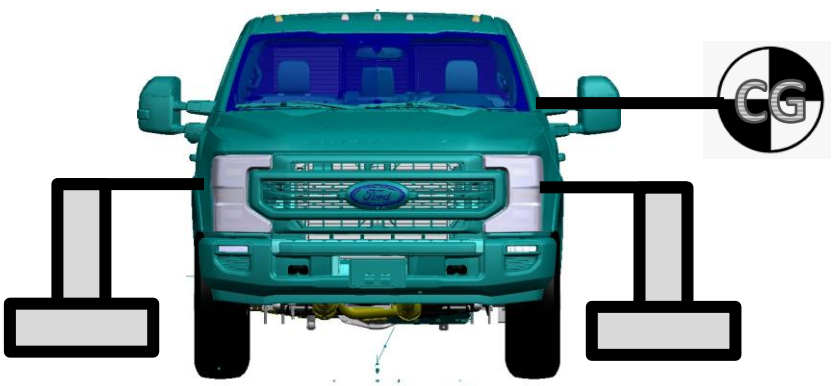
SUPER DUTY

SECOND UNIT BODY (SUB) MOUNTING GUIDELINES (CONT)

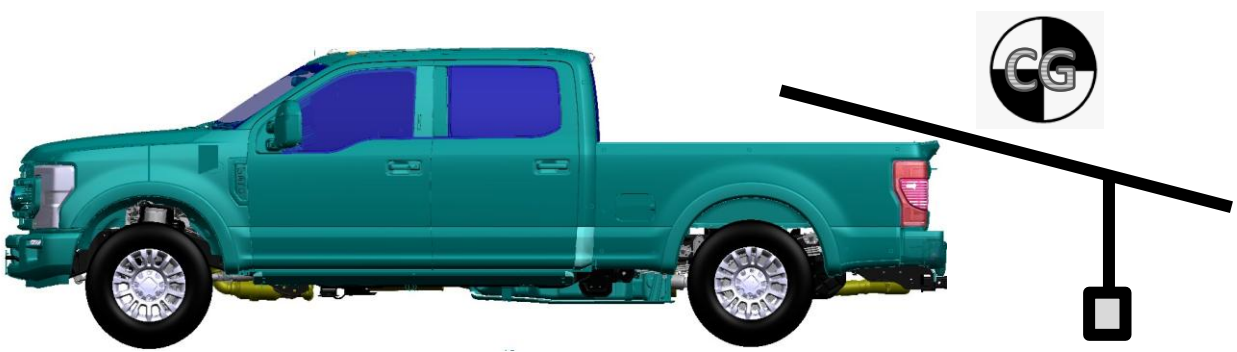
CANTILEVERED LOADS



Upfits with loads that are cantilevered outside of the footprint of the vehicle create torsional and bending moments on the frame. Special attention is need to engineer the upfit



OUTRIGGERS

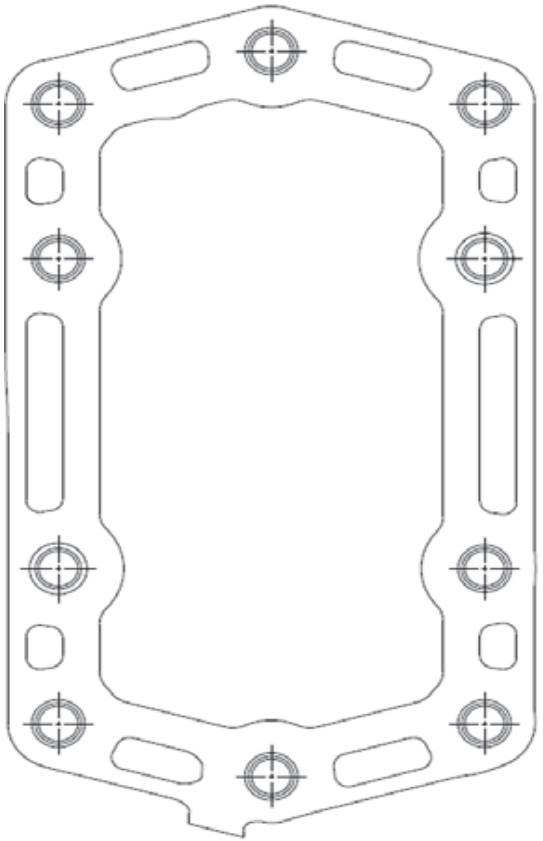


SUPPORT FOOT

Upfits that include user deployed support structures to react loads at the ground such as outriggers and support feet will create torsional and bending moments on the frame if the user deploys the support structures incorrectly. Special attention is needed to ensure proper use instructions are communicated to the user.

SUPER DUTY

PTO (POWER TAKE-OFF) PHYSICAL INFORMATION



TORQSHIFT 10R (10 SPEED) PTO PAD

NUMBER OF TEETH	46	
GEAR RATIO	0.885	
ANGLE AND HAND OF HELIX	RH Spur Gear	
RPM @1000 ENGINE RPM	1130	
TRANSMISSION RATIOS	1	4.615
	2	2.919
	3	2.132
	4	1.773
	5	1.519
	6	1.277
	7	1
	8	0.851
	9	0.687
	10	0.632
	R	-4.695
HYDRAULIC LINE PRESSURE (PTO-ENABLED IN PARK, NEUTRAL OR DRIVE)	200 PSI	
TRANSMISSION FLUID TYPE	Mercon ULV ATF	
AFTERMARKET PTO MANUFACTURERS	Munci Power Technical Service: (800) FOR-PTOS info@munciepower.com	
	Chelsea tech Technical Service: (662) 895-1052 chelseatech@parker.com	

SUMMARY MAX PTO LOADS		
ENGINE	MODE	MAX LOAD AT TRANSMISSION PTO GEAR
6.7L DIESEL	STATIONARY	300 ft-lbs
	MOBILE	150 ft-lbs (750-900 RPM)
		200 ft-lbs (>900 RPM)
	SPLIT-SHAFT	N / A
7.3L GAS	STATIONARY	250 ft-lbs
	MOBILE	125 ft-lbs

TRANSMISSION POWER TAKE-OFF (PTO) GEAR AND PORT

- **Available on F-250/350/450/550/600 7.3L and 6.7L Only**.
- Standard On Diesel Chassis Cab.
- The 10R140 PTO gear is directly linked to the torque converter impeller hub.
- NEVER use any sealer, especially silicone-based, on the PTO port gasket.
- TorqShift™ 10R140 (10-speed) Automatic Transmission: The PTO gear delivers up to 300 ft-lbs of torque (with the diesel) engine and 250 ft-lbs for the 7.3L gas engines to the aftermarket PTO.
- The powertrain cooling system can manage the heat of 40 HP (gas engine) and 60HP (diesel engine) during continuous operation. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Upfitters should consult with the PTO manufacturers to get their continuous power ratings.
- Some aftermarket PTOs may not be capable of using the full available torque. Consult with the aftermarket PTO supplier to ensure the appropriate PTO selected for the application.

SUPER DUTY

BATTERY CHARGE PROTECT (BCP) & ADAPTIVE COOLING

BATTERY CHARGE PROTECT (BCP)

This is a PCM feature, available on all Super-Duty vehicles, that helps maintain battery state-of-charge. When 12V is applied to the BCP SW circuit, the engine speed goes immediately to 600 RPM. From this state, the PCM references battery voltage and will raise engine speed as needed to help maintain battery charge.

- BCP CANNOT BE ACTIVE WHEN SEIC OR PTO MODES ARE ACTIVE.
- Max engine speed in BCP mode is 1200 rpm.
- Loss of an operating condition after BCP is engaged will require the BCP switch to be cycled before BCP will re-engage.
- A Resistor must be installed between DIESEL PTO REF (GAS PTO VREF for 7.3L) and PTO RPM for both Diesel and Gasoline engines.
- Auto Entry (6.7L Diesel only): The BCP and Mobile operation modes allow PTO to engage automatically once the engine started provided the input switch is left in the “on” position prior to starting the engine. However, loss of an operating condition after PTO is initially engaged will require the switch to be cycled before PTO will re-engage.
- Refer to sample wiring diagrams elsewhere in this BBLB.

BATTERY CHARGE PROTECT TYPICAL ENGAGEMENT PROCEDURE

1. 12V applied to BCP SW circuit.
2. PCM looks for the following enabling conditions:
   - Parking brake applied.
   - Foot off of service brake.
   - Foot off of accelerator pedal.
   - Vehicle in PARK (or NEUTRAL).
   - Vehicle speed is 0 mph (stationary).
   - Engine at a stable base idle speed.
   - 6.7L only: Engine Coolant Temperature (ECT) 20° F minimum.
   - 6.8L & 7.3L only: Engine Coolant Temperature (ECT) 20° F minimum.
3. PCM looks for a valid voltage between 0.4 to 4.4 Volts on the PTO RPM circuit. (Note --RPM resistor must be used in system)
4. Vehicle idle fluctuates slightly as PCM enters BCP mode.
5. The BCPIL circuit changes from open-circuit to ground. This is intended to provide a ground path for a BCP indicator lamp.

NOTE: BCP is a smart system. Engine idle will not increase unless the vehicle senses an increase in electrical demand. Under periods of low electrical demand, the operator may not notice any change in engine RPM. It is recommended that the modifier install an indicator lamp to alert the operator that BCP is properly engaged.

ADAPTIVE COOLING

This PCM strategy automatically restricts engine power when it senses an over-temperature condition and may interrupt the SEIC-PTO operation.
Typically, the over-temperature condition it reacts to will also show up on the temperature gage on the instrument panel.

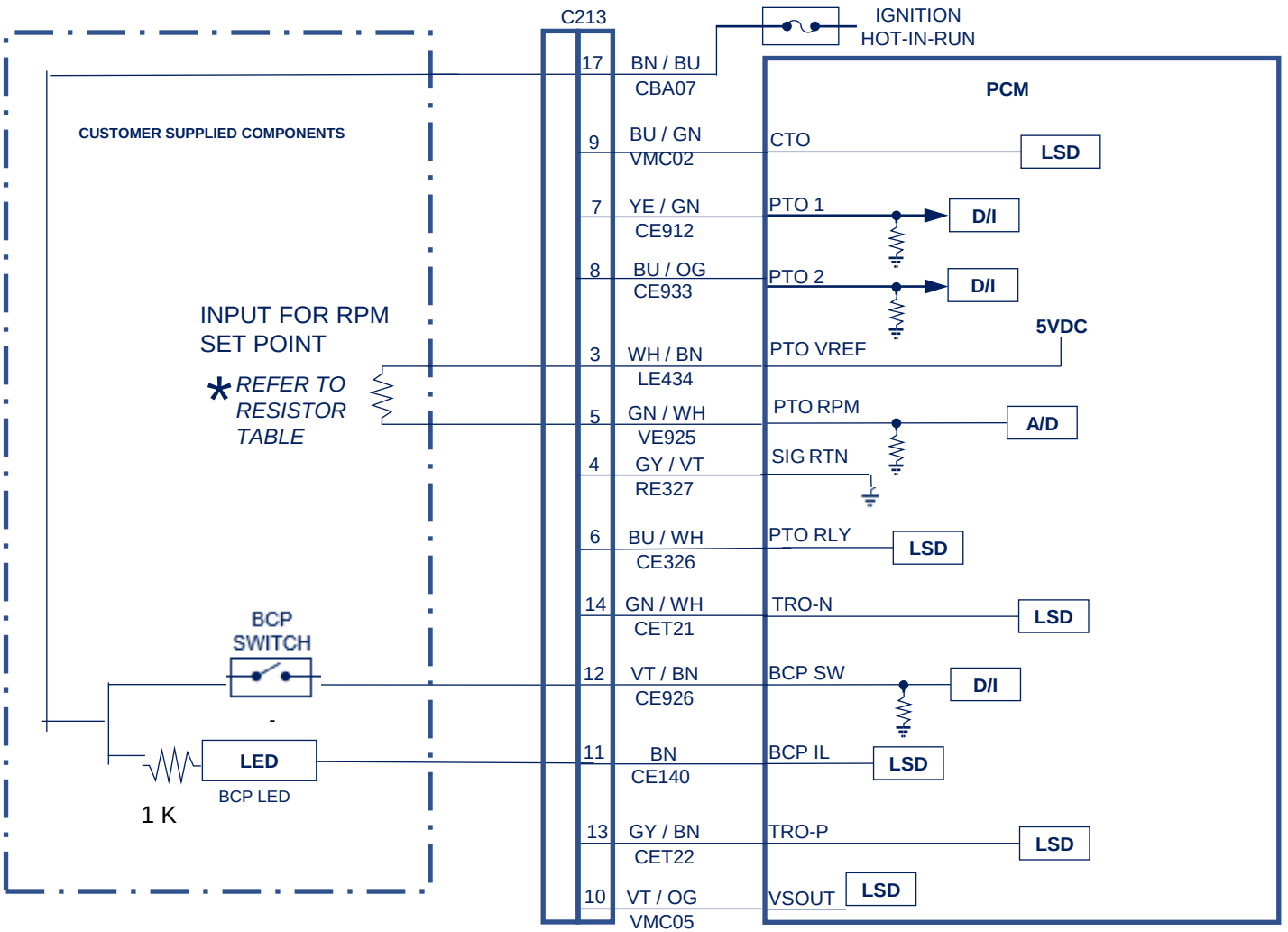
Elevated engine speed, Typical of SEIC operation, may help Adaptive cooling occurrence due to the resultant additional engine and transmission coolant flow.

However, depending on the auxiliary PTO power being demanded, 900 rpm may not be enough to prevent the power train from entering Adaptive Cooling mode, but 1500 rpm may.

For further schematic information please refer to www.motorcraftservice.com

SUPER DUTY

BATTERY CHARGE PROTECT INTERFACE: ALL

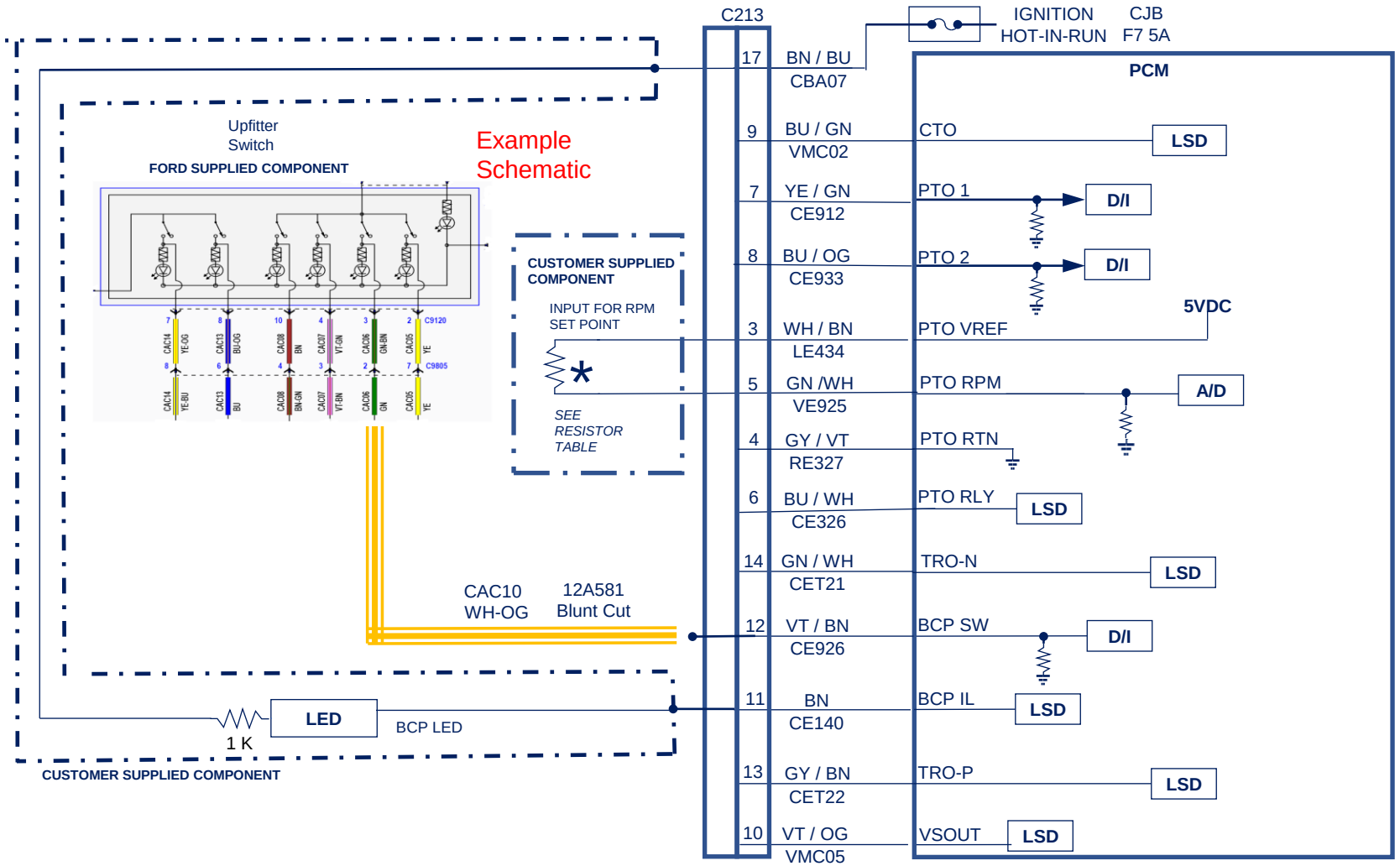


For Battery Charge Protect (BCP) to operate, the system must see an Input resistance between 641 Ω and 54K Ω on the PTO RPM input (pin 3 to pin 5). (Resistance does not affect idle speed.)

Body Builders Layout Book

SUPER DUTY

BATTERY CHARGE PROTECT USING UPFITTER SWITCHES



For Battery Charge Protect (BCP) to operate, the system must see an Input resistance between 641 Ω and 54K Ω on the PTO RPM input (pin 3 to pin 5). (Resistance does not affect idle speed.)

SUPER DUTY

SEIC AND MOBILE MODE FUNCTION

SEIC – STATIONARY ELEVATED IDLE CONTROL

SEIC is a powertrain control module (PCM) strategy that provides elevated engine speed to drive auxiliary commercial equipment such as hydraulic pumps, generators or air compressors. SEIC can also be used to maintain vehicle battery charge under extreme electrical demands, Although the battery charge protect (BCP) feature is a more effective means for doing that SEIC is standard in all PCMs for Super Duty trucks. Operates with transmission in "Park" at elevated engine speed. Intended to be commanded ONLY by applying battery voltage to certain customer access blunt-cut wire circuits, and adding a target-speed resistor, and is only available when the vehicle road speed CAN signal is zero.

- Includes a PTO RELAY circuit which changes from open-circuit to ground when enables are met that may be used to activate an indicator lamp and/or relay that can be used to provide power to an aftermarket PTO clutch or solenoid.
- Engine speed ramp-rates are configurable, by means of an FDRS tool, for all powertrains. Default ramp - rate for all powertrains is 200 RPM/ second.
  - Configurable ramp rates are as follows:
    - Diesel:100 – 800 RPM/ sec (in 100 RPM/ sec increments).
    - Gas: 100 – 1000 RPM/ sec (in 100 RPM/ sec increments).
- See wiring diagram elsewhere in this BBLB document.

SEIC TYPICAL ENGAGEMENT SEQUENCE

1. 12V is applied to PTO 1 circuit.
2. PCM looks for the following enabling conditions:
   - Parking brake applied.
   - Foot off of service brake.
   - Vehicle in PARK.(NEUTRAL Activation capable on 6.7L only)
   - Foot off of accelerator pedal.
   - Vehicle speed is 0 mph (stationary).
   - Engine at a stable base idle speed.
   - Transmission Oil Temp above 20° F.
   - 6.7L only - Engine Coolant Temperature (ECT) 20° F minimum.
   - 6.8L and 7.3L - Engine Coolant Temperature (ECT) 20° F minimum.
3. Command is sent to boost the transmission hydraulic line pressure to minimum of 200 psi, which is used by the aftermarket PTO supplier to hold their PTO Clutch. Command is sent to increase engine speed to 900 rpm.
4. The PTO RLY circuit changes from open-circuit to ground. If the upfitter uses the circuit wiring offered in this document, then this will provide battery voltage to the aftermarket PTO solenoid to engage the PTO.
5. Engine RPM ramps to the target speed as det ermined by the resistor selection.
6. See complete list of PTO Enable / Disable conditions elsewhere in this BBLB.

MOBILE MODE (7.3L AND 6.7L)

Operates in all gears and all vehicle speeds. The engine idle speed is elevated to 750 RPM when Mobile Mode is initiated. Engine RPM is controlled by the driver through the throttle pedal, but peak engine speed is not limited beyond normal operating ranges.

NOTE : Requires a 641-ohm Resistor to be installed by upfitter to achieve full engine speed range Engine Speed Limiting (ESL) feature will be available on all 3 powertrains: ESL feature controls the engine speed in Mobile Mode below a selectable maximum threshold. Maximum RPM is determined by the resistor installed between the PTO_REF and PTO RPM circuits. Limiting the maximum engine speed in mobile PTO below 1500 RPM is not recommended. Possible issues include difficulty climbing grades, engine lugging, inconsistent transmission shifting, and poor transmission shift quality. See subsequent page for RPM / resistor values.

- Transmission behavior changes in Mobile Mode due to upshifting performance; e.g. it is possible for a customer to reach max. RPM in a lower or higher gear, and the vehicle is unable to accelerate – or upshift or downshift – to the next gear.
- If this action is not desired, the operator can:
  - Ease up on the accelerator pedal and receive an upshift, or…
  - Put the transmission in manual mode and select the gears manually.
- Selected target RPM has a margin of +/- 15% based on transient conditions (for example, descending a grade).
- Mobile PTO may overshoot selected RPM by 100 - 200 RPM for drivability.
  - An additional aftermarket PTO rev limiter may be required to prevent over-speed damage to attached pumps and equipment.

MOBILE MODE (6.8L) – NON PTO

Operates in all gears and all vehicle speeds. The engine idle speed is elevated to 750 RPM when Mobile Mode is initiated. Engine RPM is controlled by the driver through the throttle pedal, but peak engine speed is not limited beyond normal operating ranges.

NOTE: Requires a 641ohm Resistor to be installed by upfitter to achieve full engine speed range ESL feature controls the engine speed in Mobile Mode below a selectable maximum threshold. Maximum RPM is determined by the resistor installed between the PTO_REF and PTO RPM circuits. Limiting the maximum engine speed with the Engine Speed Limiting (ESL) Feature in mobile PTO below 2400 RPM is ***not recommended****. Possible issues include difficulty climbing grades, engine lugging, inconsistent transmission shifting, and poor transmission shift quality. See subsequent page for RPM / resistor values.

- Transmission behavior changes in Mobile Mode due to upshifting performance; e.g. it is possible for a customer to reach max. RPM in a lower gear, and the transmission is unable to accelerate – or upshift or downshift – to the next gear.
- If this action is not desired, the operator can:
  - Ease up on the accelerator pedal and receive an upshift, or…
  - Put the transmission in manual mode and select the gears manually.
- Selected target RPM has a margin of +/- 15% based on transient conditions (for example, descending a grade).
- Mobile PTO may overshoot selected the RPM by 100-200 RPM for drivability.
  - An additional aftermarket PTO rev limiter may be required to prevent over-speed damage to attached pumps and equipment.
- NOTE : If the PTO feature is used for extended periods of time without vehicle movement it is recommended to switch to Stationary Mode. In Mobile Mode, there is no engine speed limiter unless the Engine Speed Limiter
- NOTE : (ESL) feature is enabled via the resistor chart (provided on a subsequent Page in this BBLB)

MOBILE MODE TYPICAL ENGAGEMENT SEQUENCE

1. 12V applied to PTO 2 circuit.
2. PCM looks for the following enabling conditions:
3. Transmission Oil Temp above 20° F.
   - 6. 7L: Engine Coolant Temp (ECT) 20° F minimum.
   - 7.3L: Engine Coolant Temperature (ECT) 20° F minimum.
4. (See subsequent pages for complete list of Enable / Disable conditions.)
5. Command is sent to boost transmission hydraulic -line pressure to a minimum of 200 psi, which is used by the aftermarket PTO supplier to hold their PTO clutch.
6. The PTO RLY circuit changes from open-circuit to ground. If the upfitter uses the circuit wiring offered in this document, this will provide battery voltage to the aftermarket PTO solenoid to engage the PTO.
7. Engine idle increases to 750 RPM.

SUPER DUTY

CONFIGURABLE SEIC ENGINE SPEEDS (GAS) WITH SCHEMATICS

SAMPLE PROCEDURE: THREE-SPEED SEIC (1300, 1800 AND 2400 RPM) WITH 2 SWITCHES

SCENARIO 1 (2400 RPM): Choose a resistor for the highest of the three desired speeds, 2400 RPM in this example, which requires a 641-Ohm resistor (per the resistor tables). This will be referred to as R3. When Switch 2 is closed, the total resistance between PTO_VREF and PTO_RPM is R3 = 641 Ohms.
R3 = 641 Ohms.

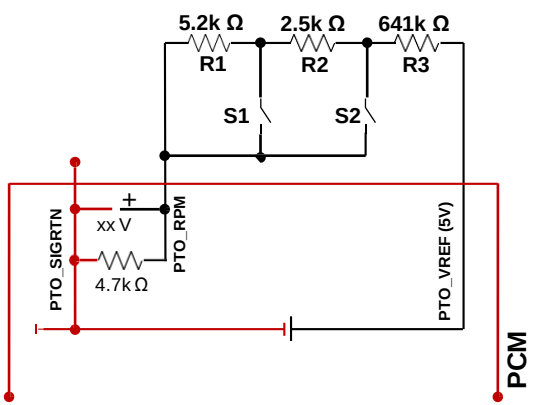
With switch 1 closed or open and switch 2 closed, the total resistance between PTO_VREF and PTO_RPM is R3 = 641 Ohms, resulting in 4.4 Volts between PTO_RPM and PTO_SIGRTN, resulting in 2400 RPM's.

SCENARIO 2 (1800 RPM): Choose a resistor for the middle speed, 1800 RPM in this case, which requires a total resistance between PTO_VREF and PTO_RPM of 3133 Ohms. When Switch 1 is closed, the total resistance between PTO_VREF and PTO_RPM needs to be 3133 Ohms (per the resistor tables), which is the sum of R3 and R2. Switch 2 must be open in this scenario.
Since R3 + R2 = 3133 Ohms, R2 = 3133 Ohms – R3
R2 = 3133 Ohms - 641 Ohms
R2 =2492 Ohms

With switch 1 closed and switch 2 open, the total resistance between PTO_VREF and PTO_RPM is R3+R2 = 3133 Ohms, resulting in 3.0 Volts between PTO_RPM and PTO_SIGRTN, resulting in 1800 RPM's (1805 RPMs to be exact).

SCENARIO 3 (1300 RPM): Choose a resistor for the lowest of the three speeds, 1300 RPM in this case, which requires a total resistance between PTO_VREF and PTO_RPM of 8356 Ohms (per the resistor tables). When switch 1 and switch 2 are both open, the total resistance between PTO_VREF and PTO_RPM needs to be 8356 Ohms, which is the sum of R1, R2 and R3.
Since R1 + R2 + R3 = 8356 Ohms,
R1 = 8356 Ohms – R2 – R3
R1 = 8356 Ohms - 2942 Ohms - 641 Ohms
R1 = 5223 Ohms

With switch 1 and switch 2 both open, the total resistance between PTO_VREF and PTO_RPM is R1+R2+R3 = 8356 Ohms, resulting in 1.8 Volts between PTO_RPM and PTO_SIGRTN, resulting in 1300 RPMs (1295 RPM to be exact).



SAMPLE PROCEDURE: THREE-SPEED SEIC (1300, 1800 AND 2400 RPM) WITH 3-POSITION SWITCH

SCENARIO 1 (2400 RPM): Choose a resistor for the highest of the three desired speeds, 2400 RPM in this example, which requires a 641-Ohm resistor (per the resistor tables). This will be referred to as R3. When the switch is in Position 3, the total resistance between PTO_VREF and PTO_RPM is R3 = 641 Ohms.
R3 = 641 Ohms.

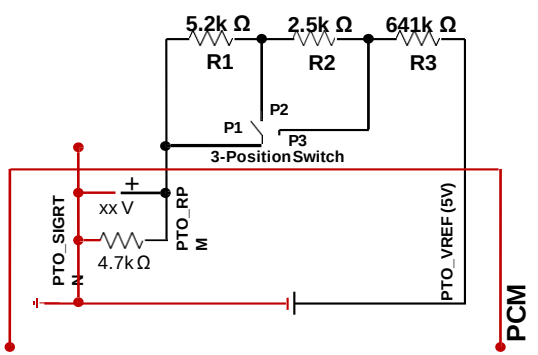
When the switch is in Position3, the total resistance between PTO_VREF and PTO_RPM is R3 = 641 Ohms, resulting in 4.4 Volts between PTO_RPM and PTO_SIGRTN, resulting in 2400 RPM.
Note that in Position 3, the measured resistance across R1 and R2 is zero Ohms, thus the total resistance between PTO_VREF and PTO_RPM is R3.

SCENARIO 2 (1800 RPM): Choose a resistor for the middle speed, 1800 RPM in this case, which requires a total resistance between PTO_VREF and PTO_RPM of 3133 Ohms (per the resistor tables). So when the switch is in Position 2, the total resistance between PTO_VREF and PTO_RPM needs to be 3133 Ohms, which is the sum of R2 and R3.
Since R2 + R3 = 3133 Ohms,
R2 = 3133 Ohms – R3
R2 = 3133 Ohms - 641 Ohms
R2 = 2492 Ohms

When the switch is in Position 2, the total resistance between PTO_VREF and PTO_RPM is R3 + R2 = 3133 Ohms, resulting in 3.0 Volts between PTO_RPM and PTO_SIGRTN, resulting in 1805 RPM (~1800).
Note that in Position 2, the measured resistance across R1 is zero Ohms, thus the total resistance between PTO_VREF and PTO_RPM is the sum of R2 and R3.

SCENARIO 3 (1300 RPM): Choose a resistor for the lowest of the three speeds, 1300 RPM in this case, which requires a total resistance between PTO_VREF and PTO_RPM of 8356 Ohms (per the resistor tables). So, when the switch is in Position 1, the total resistance between PTO_VREF and PTO_RPM needs to be 8356 Ohms, which is the sum of R1, R2 and R3.
Since R1 + R2 + R3 = 8356 Ohms,
R1 = 8356 Ohms – R2 – R3
R1 = 8356 Ohms - 2942 Ohms - 641 Ohms
R1 = 5223 Ohms

When the switch is in Position 2, the total resistance between PTO_VREF and PTO_RPM is R3 + R2 = 3133 Ohms, resulting in 3.0 Volts between PTO_RPM and PTO_SIGRTN, resulting in 1805 RPM (~1800).
Note that in Position 2, the measured resistance across R1 is zero Ohms, thus the total resistance between PTO_VREF and PTO_RPM is the sum of R2 and R3.



SUPER DUTY

SEIC / PTO INTERFACE - SPLIT SHAFT MODE (6.7L DIESEL ENGINE ONLY)

SPLIT-SHAFT MODE (DIESEL ONLY)
Split-shaft mode engages the transmission output shaft.
Split-Shaft Mode can be enabled by wiring in a resistive-circuit as shown in the SEIC Interface Schematics (see following pages). A resistor with the recommended value must be selected and wired into the circuit to achieve Target Engine RPM - refer to the Gas and Diesel Resistor Chart for resistor values. Split-Shaft mode requires nominal (12V dc) voltage to be applied to both PTO 1 and PTO 2 circuits.

SPLIT SHAFT ENGAGEMENT PROCEDURE
Ensure the following engine is running and the engine coolant temp is above 20° F. Apply park brake.
Disconnect vehicle drivetrain (transmission in NEUTRAL, 4x4 DISENGAGED) and engage PTO load.

With foot off both the service brake and accelerator pedals, turn Split-Shaft PTO on. Depress the service brake, and while pressing the service brake, shift transmission into DRIVE and continue pressing the service brake for a minimum of 3 seconds to allow the system to shift the transmission into 7th gear, lock the torque converter, increase line pressure and elevate engine speed to a “stand -by” PTO speed (approximately 650 RPM).

Release the service brake and engine speed will ramp up to the target engine speed in a controlled manner.*

See elsewhere in this BBLB for a complete list of PTO Enable / Disable conditions.

** If vehicle unexpectedly lurches or moves upon releasing service brake, immediately depress brake pedal and shift transmission into PARK or NEUTRAL to secure vehicle. Contact Upfitter immediately.*

SUPER DUTY

SEIC / PTO ENABLE/DISABLE CONDITIONS & INTERFACE CONNECTORS

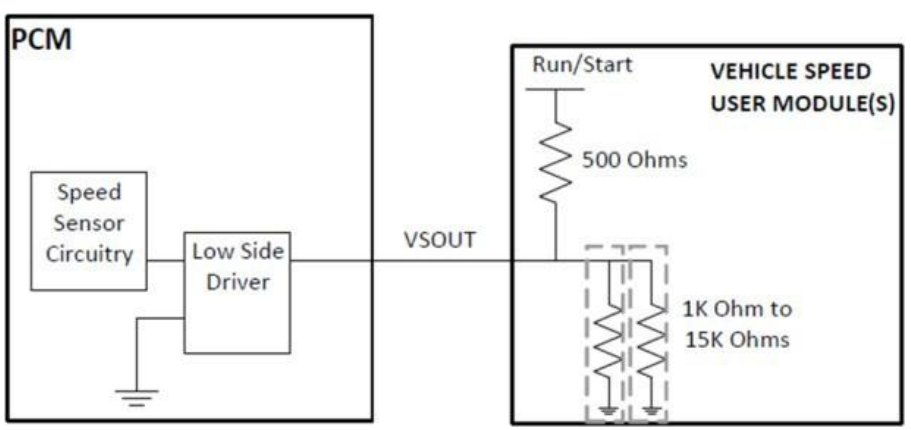
SEIC / PTO ENABLE DISABLE CONDITIONS

VEHICLE CONDITIONS TO ENABLE SEIC (ALL ARE REQUIRED)	VEHICLE CONDITIONS THAT DISABLE SEIC (ANY ONE REQUIRED) [1]	SEIC	SPLIT-SHAFT (DIESEL ONLY) [3]	MOBIL MODE
Parking brake applied	Parking brake disengaged	Yes	Yes	No
Foot off service brake	Service brake depressed	Yes	Yes [2]	No
Vehicle in PARK (NEUTRAL Activation on 6.7L Only)	Vehicle taken out of PARK	Yes	Yes [2]	No
Foot off accelerator pedal	Accelerator pedal depressed	Yes	Yes	No
Vehicle speed is 0 MPH (stationary)	Vehicle speed is not 0 MPH	Yes	Yes	No
Engine at a stable base idle speed	- -	Yes	Yes	No
Transmission oil temp. above 20° F	Transmission oil temperature exceeds 240° F (Diesel) or 250° F (Gas)	Yes	Yes	Yes
Engine coolant temp. at least 20° F (6.7L Diesel)	Engine coolant temperature exceeds 230°F	Yes	Yes	Yes
Engine coolant temp. at least 20° F (7.3L Gas)	Engine coolant temperature exceeds 230°F	Yes	N / A	Yes
- -	Catalyst temperature limit	Yes	Yes	Yes

NOTE 1: A "change-of-state" at the "PTO REQ1" input (for Stationary Elevated Idle Control non-Split-Shaft), or for both "PTO REQ1 and PTO REQ2" inputs (for Stationary Elevated Idle Control Split - Shaft) is required to re-invoke Stationary Elevated Idle Control. When a disable is seen by the PCM, the Stationary Elevated Idle Control function is de-activated, the "PTO RELAY" output circuit changes from a "ground-source" to "open-circuit" and engine speed returns to base idle. To reactivate Stationary Elevated Idle Control, the operator must open the PTO Switch to the "PTO REQ1" and "PTO REQ2" inputs, then close the PTO Switch again to the "PTO REQ1" or "PTO REQ1 and PTO REQ2" inputs.

NOTE 2: See Split-Shaft Mode description elsewhere in this BBLB.

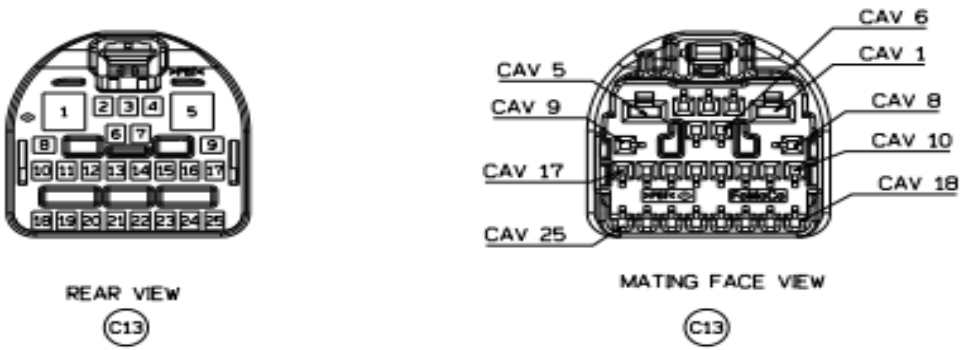
NOTE 3: Brake pedal must remain depressed for a minimum of 3 seconds after moving gear shifter into DRIVE position in order to enable Split-Shaft Mode.



ILLUSTRATIONFOR PIN 12
(SEE FOLLOWING PAGE)

SEIC/PTO CONNECTOR WITH CUSTOMER ACCESS CIRCUITS

All Super duty trucks include a blunt cut pigtail harness with female SEIC interface connector located under the side kick-panel in the passenger footwell. This pigtail is included on all F-Series Super Duty vehicles.

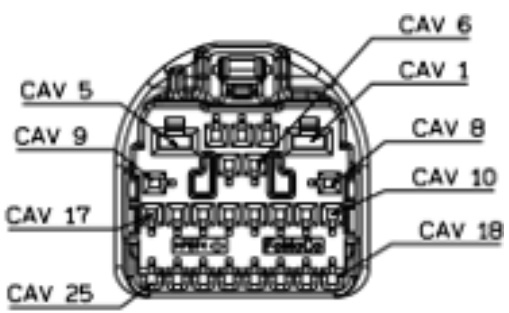


PIN		GAS	DIESEL	DESCRIPTION
1				
2				
3	LE434	WH-BN	WH-BN	PTO VREF
4	RE327	GY-VT	GY-VT	PTO RETURN
5	VE925	GN-WH	GN-WH	PTO RPM
6	CE326	BU-WH	BU-WH	PTOIL
7	CE912	YE-GN	YE-GN	PTO1 REQUEST
8	CE933	BU-OG	BU-OG	PTO2 REQUEST
9	VMC02	BU-GN	BU-GN	CTO (Deviated color for Poke Yoke)
10	VMC05	VT-OG	VT-OG	VS OUT
11	CE140	BN	BN	BCP LAMP
12	CE926	VT-BN	VT-BN	BCP SW
13	CET22	GY-BN	GY-BN	TRO-P
14	CET21	GN-WH	GN-WH	TRO-N
16	CCB06	VT-WH	VT-WH	AFTERMARKET BOO/CHMSL/TBC OUTPUT SMART FET
17	CBA07	BN-BU	BN-BU	UPFITTER SWITCHES FS07 5A MICRO2

SUPER DUTY

PTO / CUSTOMER ACCESS CONNECTOR – BLUNT CUT DESCRIPTIONS

REAR VIEW
C13

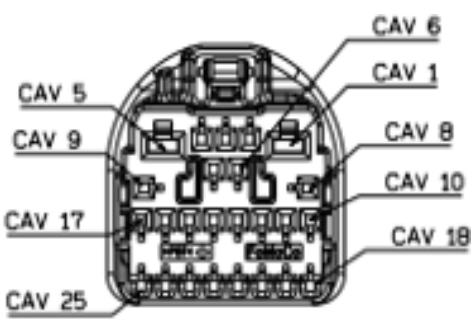


MATING FACE VIEW
C13

PIN	SIGNAL	WIRE COLOR	GAS BCM PIN	DIESEL BCM PIN	DESCRIPTION
11	BLUNT CUT BCPIL	BN	C175B-17	C1232B-20	-A low-side driver, changing from "open circuit" to "ground" indicating that BCP is in effect. -Intended for powering an indicator lamp.
9	BLUNT CUT CTO	BU / GN	C175B-77	C1232B-10	A digital output from the PCM that indicates a Clean Tachometer Output to provide an indication of engine RPM. The low-side driver in the PCM will switch the output off and on: "Off" will allow the output to be pulled up close to VPWR, and "On" will put the output to zero volts at a Frequency = ((Engine RPM x Number of Cylinders) / 120) with a duty cycle of 50%. The customer-supplied external controller should have a high-impedance input such that it does not impact the PCM's ability to provide a Clean Tach Out signal.
12	BLUNT CUT BCP SW	VT / BN	C175B-82	C1232B-21	-Applying vehicle battery voltage to this wire begins Battery Charge Protect (BCP). -BCP regulates engine speed between 600-1200 RPM to maintain required charge system voltage.
10	BLUNT CUT VS OUT	VT / OG	C175B-78	C1232B-5	An output from the PCM at a frequency of 2.22 times vehicle speed in MPH. The low-side driver in the PCM will switch the output OFF and ON. The OFF state of the low-side driver will result in an output that is pulled up close to RUN/START voltage. The ON state of the low-side driver will result in an output that is pulled close to ground. To properly reference this output, the customer-supplied external controller needs to incorporate a 500 Ohm pull-up resistor to RUN/START and a 1K to 15K Ohm pull-down resistor to ground. Using a 15K Ohm pull-down resistor will result in voltage signal that is closer to RUN/START voltage during the OFF state as compared to using a 1K Ohm pull-down resistor as this is a simple voltage divider in the OFF state where: Signal Voltage = (RUN/START voltage) x (pull-up resistor / pull-down resistor). See circuit illustration on previous page.
14	CUST_ACC_BC_TRO_N	GN / WH	C175E-59 *	C1232T-24	An output from the PCM that indicates when the Transmission Range Sensor is indicating that the transmission is in the Neutral position. The low-side driver (160 mA max) in the PCM will pull this output to ground when active (i.e. when trans selector is in Neutral position). To properly reference this output, the customer-supplied external controller needs to pull this output up to VPWR with a 680 Ohm resistor. Thus when the output is active, the voltage at this output will be zero volts. When this output is not active, the output will be pulled up to VPWR by the 680 Ohm resistor.
13	CUST_ACC_BC_TRO_P	GY / BN	C175E-19	C1232T-20	An output from the PCM that indicates when the Transmission Range Sensor is indicating that the transmission is in the Park position. The low-side driver (160 mA max) in the PCM will pull this output to ground when active (i.e. when trans selector is in the Park position). To properly reference this output, the customer-supplied external controller needs to pull this output up to VPWR with a 680 Ohm resistor. Thus when the output is active, the voltage at this output will be zero volts. When this output is not active, the output will be pulled up to VPWR by the 680 Ohm resistor.
15					

PTO / CUSTOMER ACCESS CONNECTOR – BLUNT CUT DESCRIPTIONS (CONT)

REAR VIEW
C13



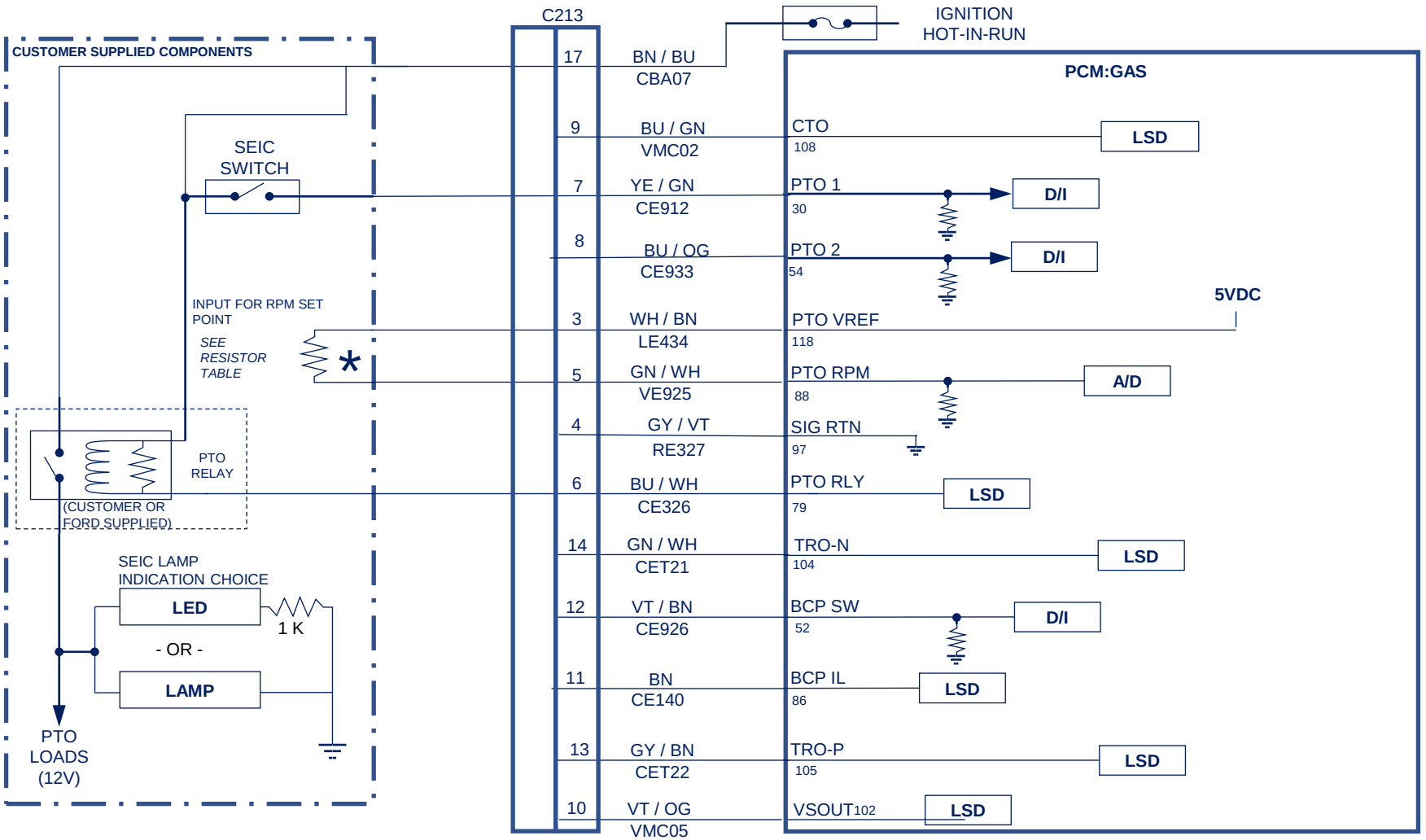
MATING FACE VIEW
C13

PIN	SIGNAL	WIRE COLOR	GAS BCM PIN	DIESEL BCM PIN	DESCRIPTION
17	RUN-START (5A FUSED)	BN/BU	C2280C-23		12V, 5-amp fused feed intended for SEIC / PTO use.
6	BLUNT CUT PTO RLY	BU / W H	C175B-98	C1232B-11	-A low-side driver, changing from "open circuit" to "ground" indicating that the engine is ready for PTO operation to begin and that a PTO load may be applied. -Intended for powering a PTO indicator lamp, or tun on a relay coil (not to exceed 1-amp). An LED lamp requires addition of a resistor in-series.
4	Diesel_ACC_BC_PTORT_D	GY / VT	- -	C1232B-22	A ground reference, buffered, used to complete the resistor circuit for engine speed selection.
7	BLUNT CUT PTO 1	YE / GN	C175B-84	C1232B-6	Applying vehicle battery voltage to this wire initiates SEIC **Stationary Mode** process. -Signals TorqShift transmission to enter SEIC Stationary Mode protocol. -Verifies safety enablers. -Turns off OBD and other emission-related monitoring. -Elevates engine speed to target found at PTO RPM circuit. -Invokes the PTO relay circuit when safety enablers are met. -Looks for the target engine speed requested at the PTO RPM Circuit using a resistor or potentiometer.
5	BLUNT CUT PTO RPM	GN / WH	C175B-85	C1232B-8	-Requires the addition of a resistor or potentiometer for any **SEIC / PTO** mode. -Resistor / potentiometer selection determines the fixed or variable engine target speed. -Combine in-circuit with DIESEL PTO REF and DIESEL PTOGND. -Speed range available: 900 to 3,000 RPM (700 RPM minimum for split-shaft operation).
3	Diesel_ACC_BC_PTORF_D	WH / BN	- -	C1232B-55	-A 5-volt reference, buffered against shorts-to-ground or power. -Used to complete the resistor circuit for engine speed selection.
8	BLUNT CUT PTO 2	BU / OG	C175B-88	C1232B-4	Applying vehicle battery voltage to this wire initiates **Mobile PTO Mode**. -Signals TorqShift transmission to enter Mobile Mode protocol. -Verifies safety enablers. -Turns off OBD and other emission-related monitoring. -Invokes the PTO relay circuit when safety enablers are met. -Requires valid resistance on PTO RPM input for system to function.
4	GAS SIG RTN C	GY / VT	C175B-51	- -	A ground reference, buffered, used to complete the resistor circuit for engine speed selection.
17	- -	- -	- -	- -	- -
3	BLUNT CUT PTO_VREF	WH / BN	C175B-52	- -	-A 5-volt reference, buffered against shorts to ground or power. -Used to complete the resistor circuit for engine speed selection.
19	- -	- -	- -	- -	- -
20	- -	- -	- -	- -	- -
21	- -	- -	- -	- -	- -
22	- -	- -	- -	- -	- -

Body Builders Layout Book

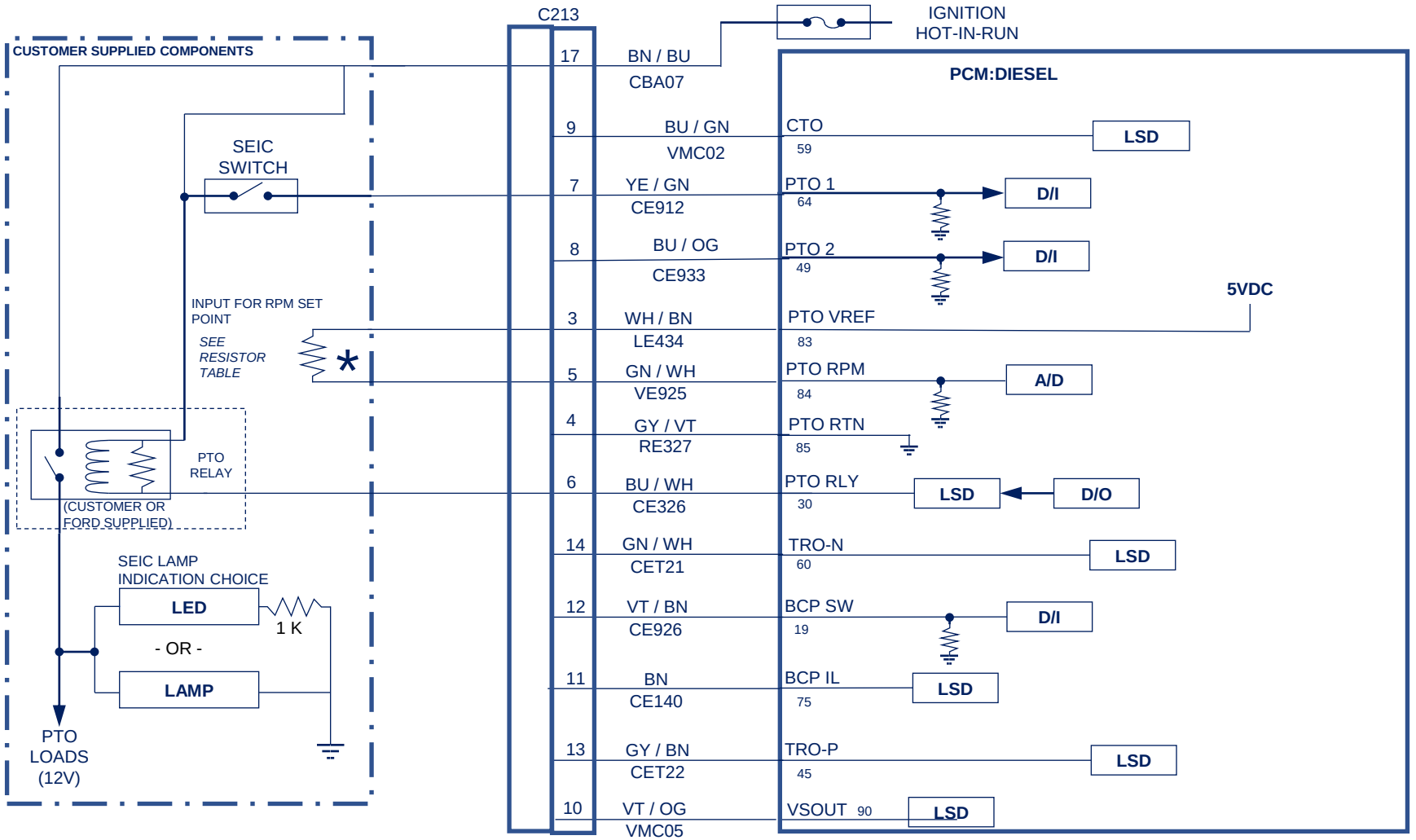
SUPER DUTY

SEIC INTERFACE - 6.8L/7.3L GAS



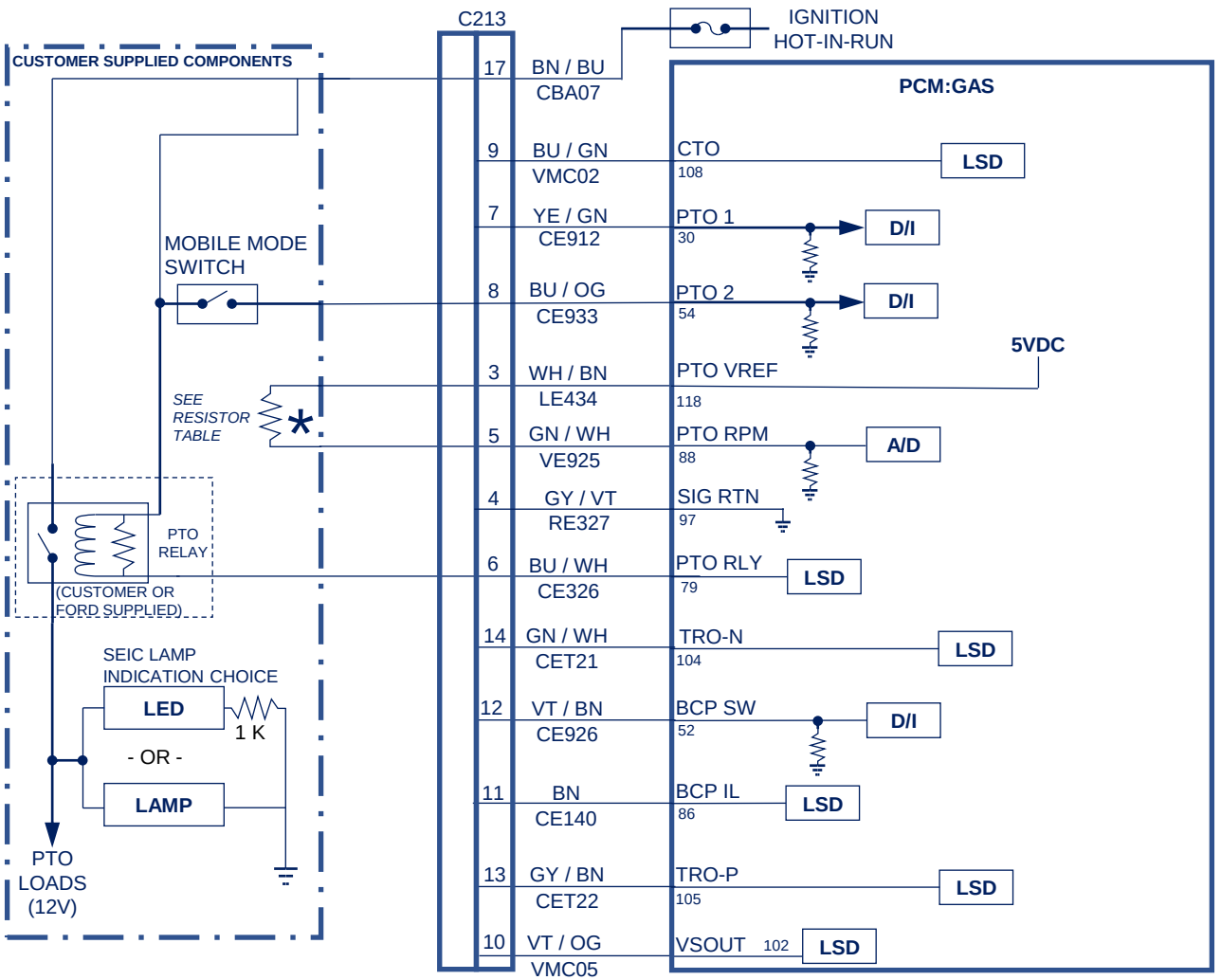
SUPER DUTY

SEIC INTERFACE - 6.7L DIESEL



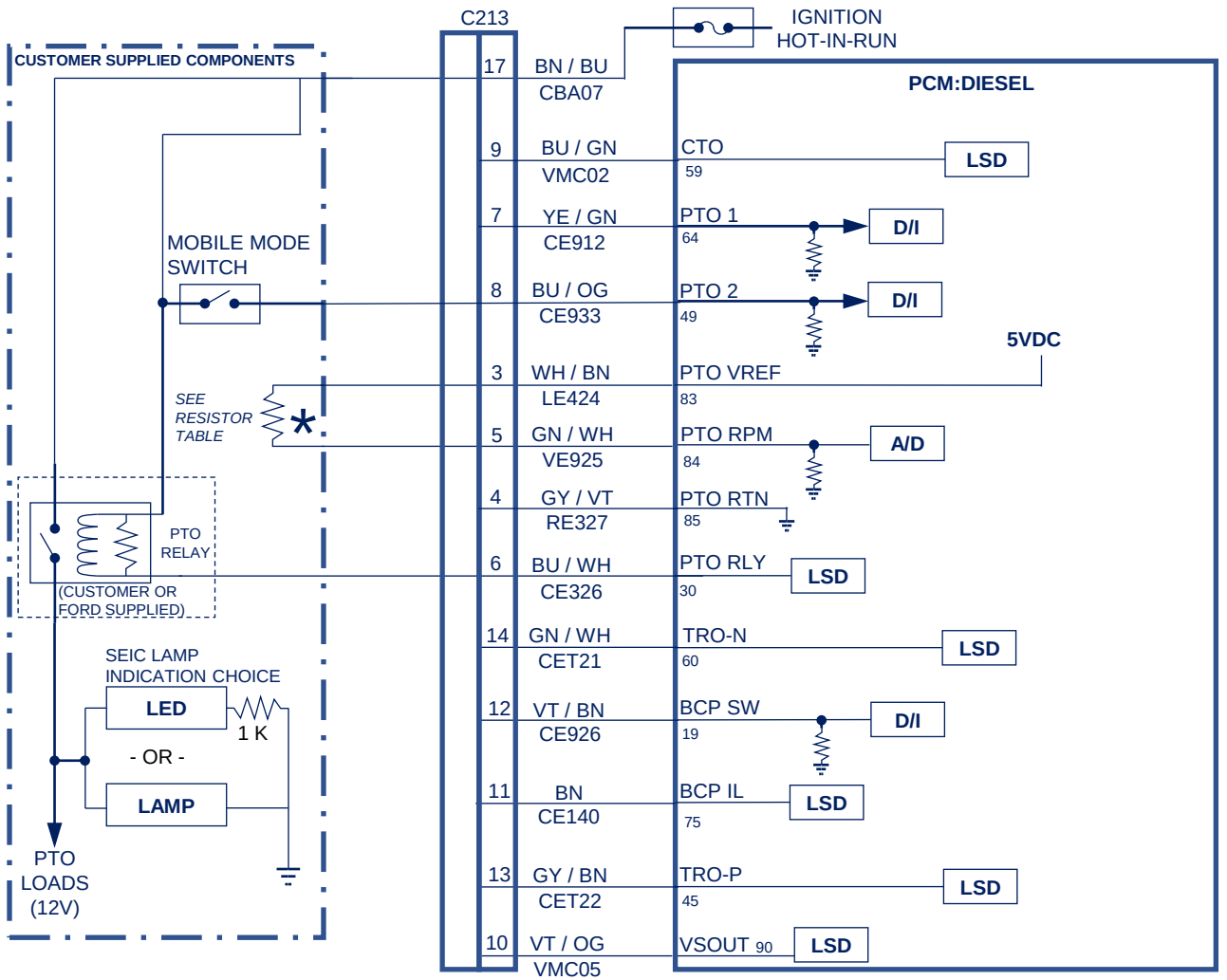
SUPER DUTY

SEIC / PTO INTERFACE - 7.3L MOBILE MODE

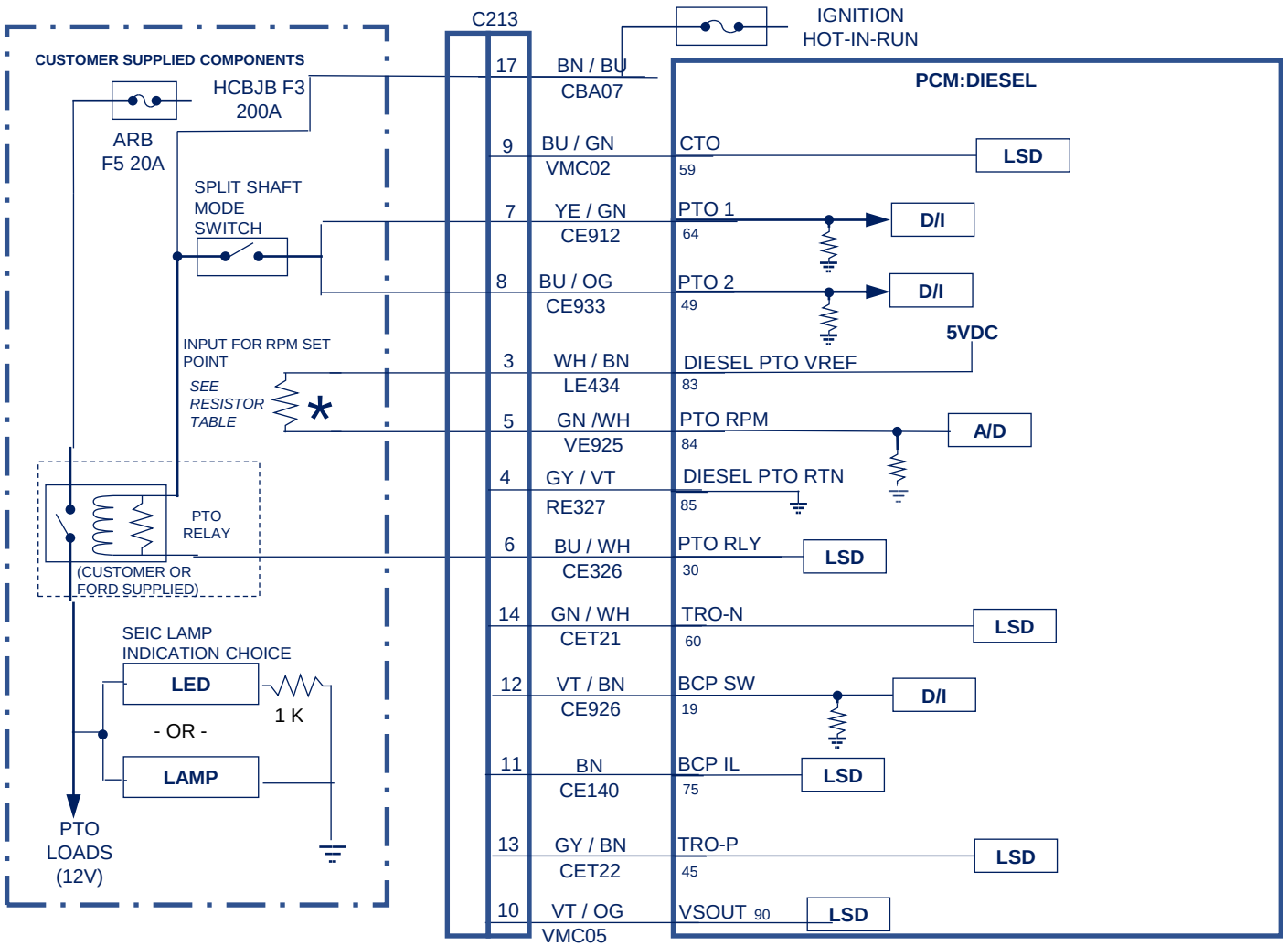


SUPER DUTY

SEIC / PTO INTERFACE - 6.7L MOBILE MODE

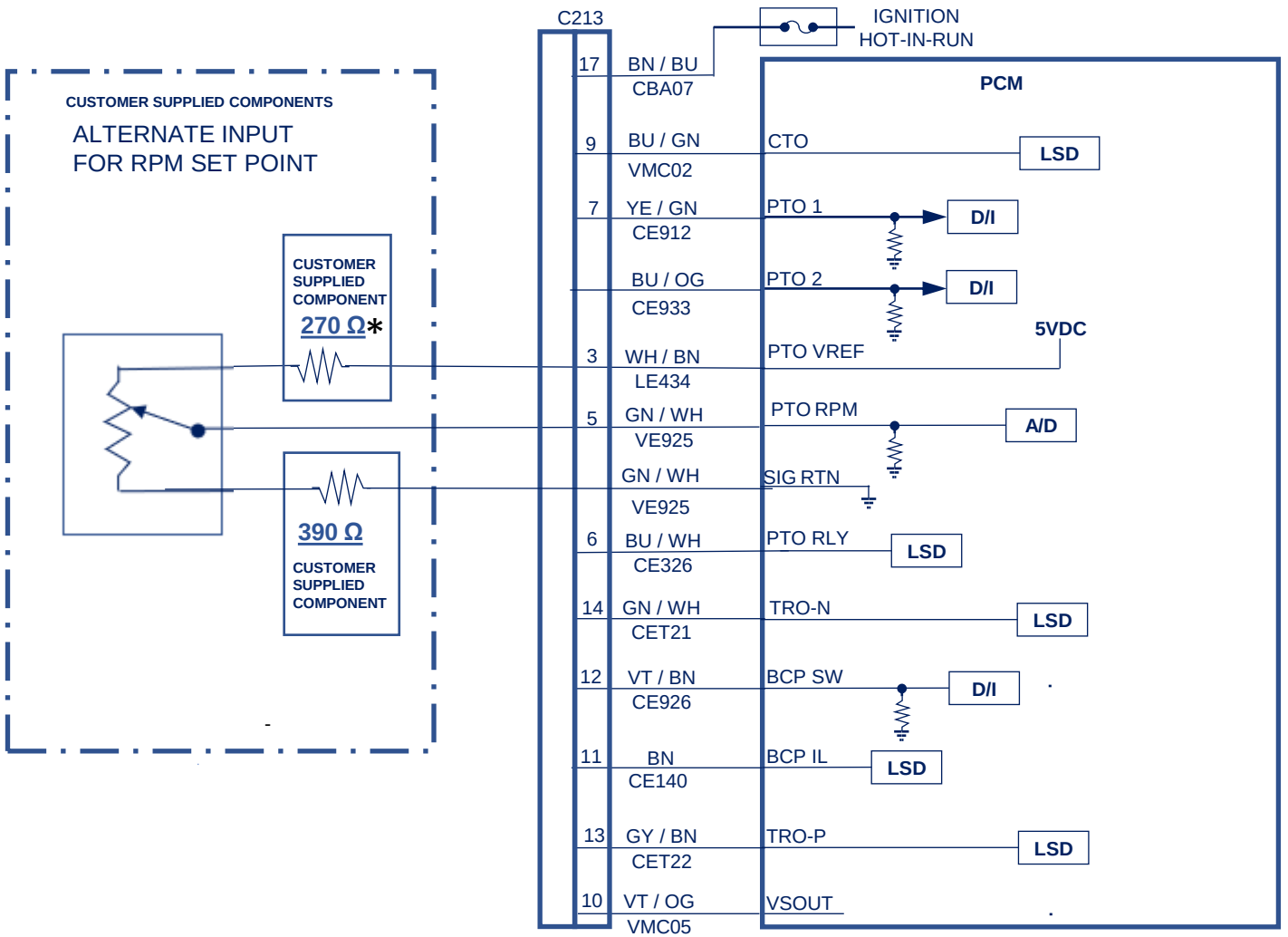


SEIC / PTO INTERFACE: SPLIT-SHAFT MODE - 6.7L DIESEL SCHEMATIC



SUPER DUTY

ALTERNATE INPUT FOR RPM SETPOINT USING A POTENTIOMETER: ALL

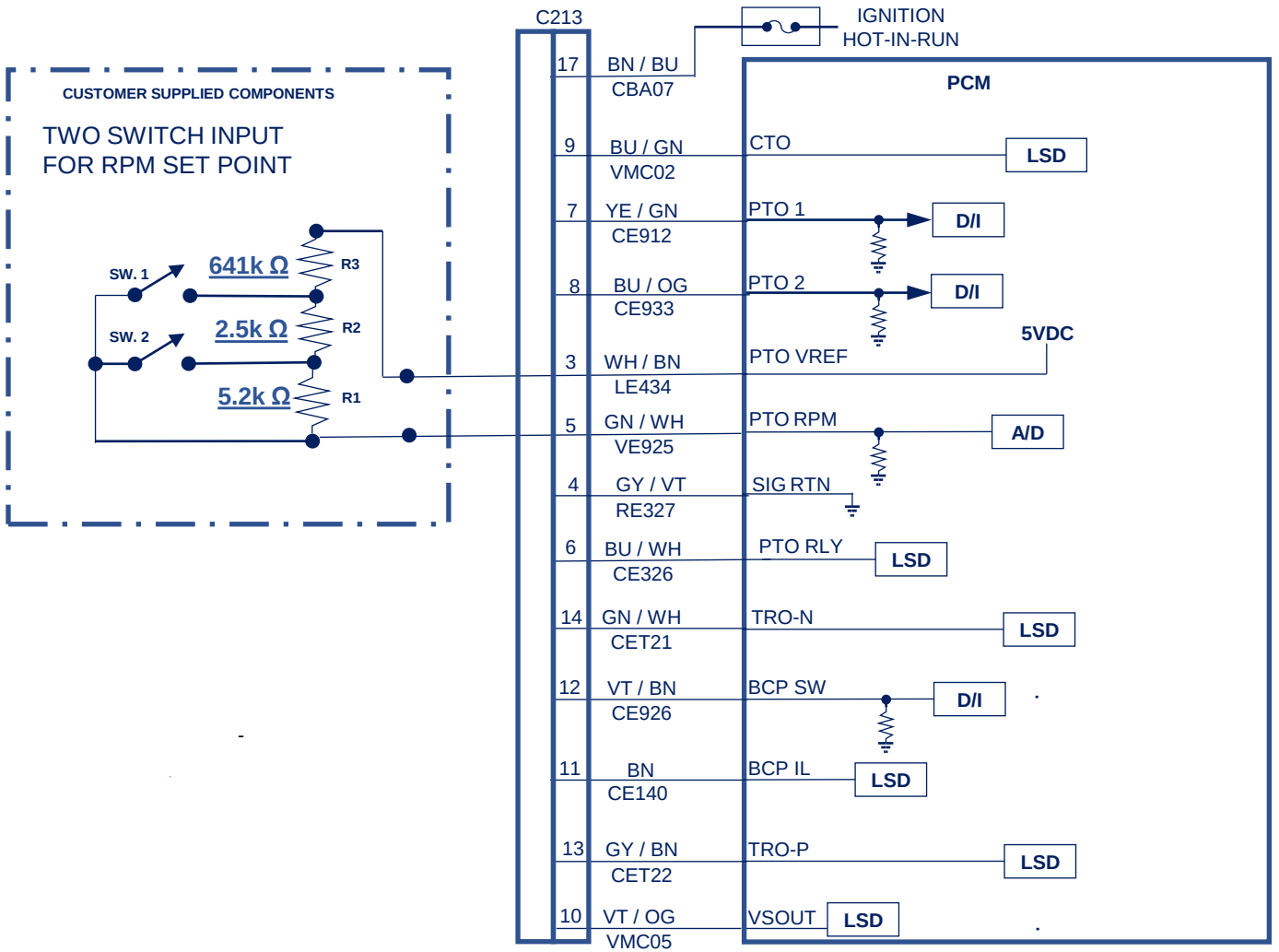

C213
IGNITION
HOT-IN-RUN
CUSTOMER SUPPLIED COMPONENTS
ALTERNATE INPUT
FOR RPM SET POINT
CUSTOMER SUPPLIED COMPONENT
270 Ω*
390 Ω
CUSTOMER SUPPLIED COMPONENT
PCM
17 BN / BU CBA07
9 BU / GN VMC02 CTO LSD
7 YE / GN CE912 PTO 1 D/I
BU / OG CE933 PTO 2 D/I
5VDC
3 WH / BN LE434 PTO VREF
5 GN / WH VE925 PTO RPM A/D
GN / WH VE925 SIG RTN
6 BU / WH CE326 PTO RLY LSD
14 GN / WH CET21 TRO-N LSD
12 VT / BN CE926 BCP SW D/I
11 BN CE140 BCP IL LSD
13 GY / BN CET22 TRO-P LSD
10 VT / OG VMC05 VSOUT

*These resistors once installed will prevent voltage at the PTO_RPM input from going out of range low (less than 0.2V) and out of range high (more than 4.7V) when the operator rotates the Potentiometer to either end.

If the voltage at the PTO_RPM input is out of range low or high, it will block/abort PTO operation.

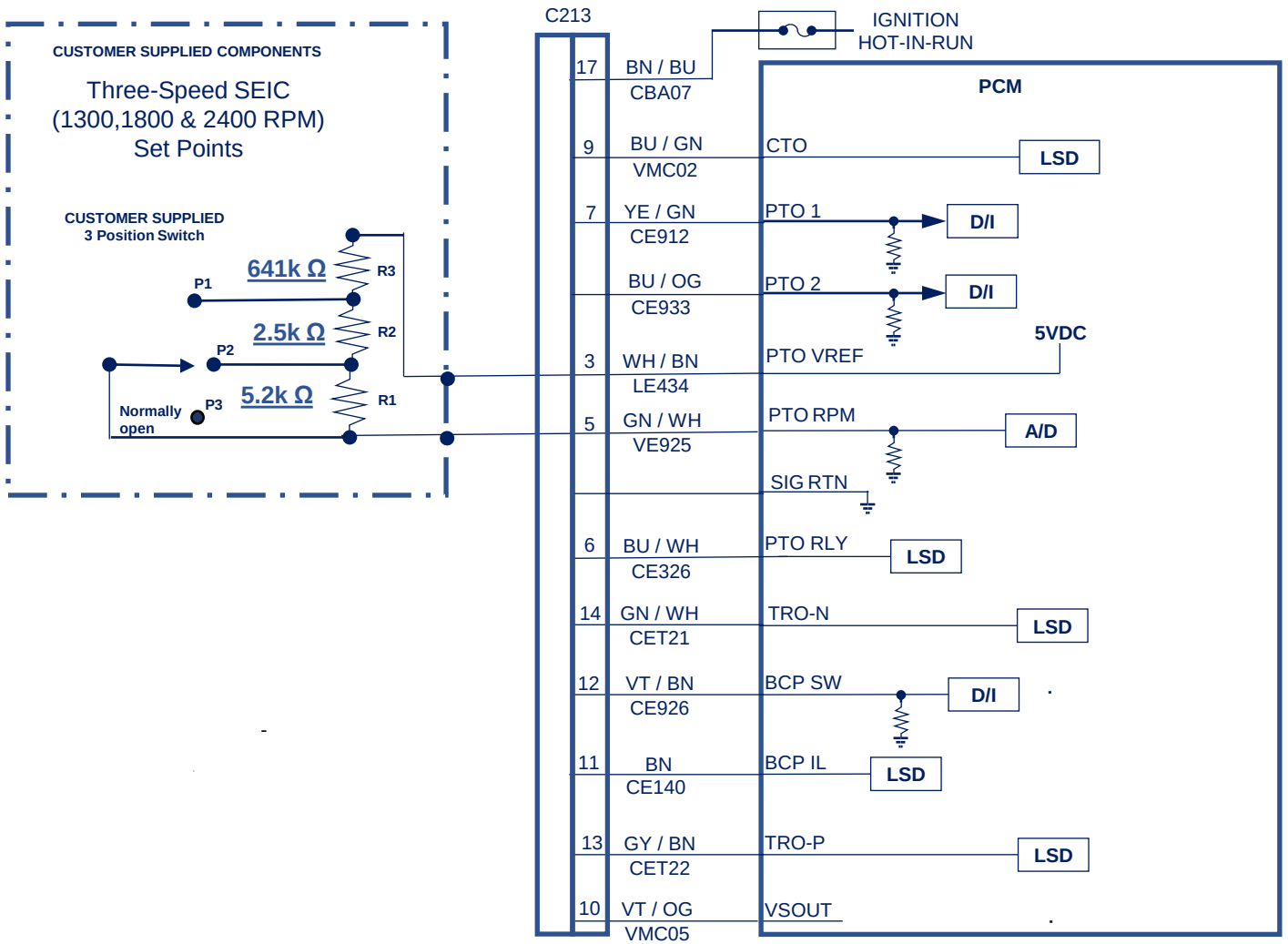
SUPER DUTY

ALTERNATE INPUT FOR RPM SETPOINT USING TWO SWITCHES: ALL


CUSTOMER SUPPLIED COMPONENTS
TWO SWITCH INPUT
FOR RPM SET POINT
SW. 1
SW. 2
641k Ω
2.5k Ω
5.2k Ω
R3
R2
R1
C213
IGNITION
HOT-IN-RUN
PCM
17 BN / BU CBA07
9 BU / GN VMC02 CTO LSD
7 YE / GN CE912 PTO 1 D/I
8 BU / OG CE933 PTO 2 D/I
5VDC
3 WH / BN LE434 PTO VREF
5 GN / WH VE925 PTO RPM A/D
4 GY / VT RE327 SIG RTN
6 BU / WH CE326 PTO RLY LSD
14 GN / WH CET21 TRO-N LSD
12 VT / BN CE926 BCP SW D/I
11 BN CE140 BCP IL LSD
13 GY / BN CET22 TRO-P LSD
10 VT / OG VMC05 VSOUT LSD

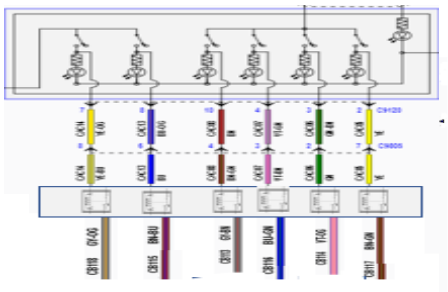
SUPER DUTY

ALTERNATE INPUT FOR RPM SETPOINT USING A THREE-POSITION SWITCH: ALL



SEIC / PTO INTERFACE: FORD SUPPLIED RELAY LOCATED IN AUXILIARY RELAY PANEL

Example Schematic



Upfitter Switch

12A581 Blunt Cut Circuits
WH / OG CAC11
GY / OG CAC12

C213

17	BN / BU CBA07	IGNITION HOT-IN-RUN	
9	BU / GN VMC02	CTO	LSD
7	YE / GN CE912	PTO 1	D/I
8	BU / OG CE933	PTO 2	D/I
3	WH / BN LE434	PTO VREF	5VDC
5	GN /WH VE925	PTO RPM	A/D
4	GY / VT RE327	PTO RTN	
6	BU / WH CE326	PTO RLY	LSD
14	GN / WH CET21	TRO-N	LSD
12	VT / BN CE926	BCP SW	D/I
11	BN CE140	BCP IL	LSD
13	GY / BN CET22	TRO-P	LSD
10	VT / OG VMC05	VSOUT	LSD

PCM

INPUT FOR RPM SET POINT
SEE RESISTOR TABLE
*

12A581 Blunt Cut
BU / BN CE924
BN / BU CAC09

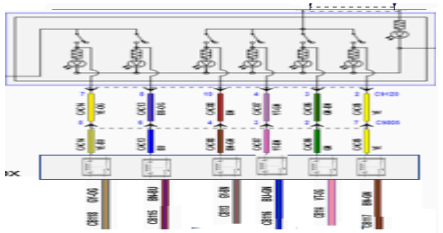
(FORD SUPPLIED
(In Auxiliary Relay Box)

High Current Battery Junction Box F3 200A
IGNITION HOT-IN-RUN
CJB F7 5A
Auxiliary Relay Box F5 20A
PTO RELAY

PTO LOADS (12V)
GN /WH

1 K
LED
- OR -
LAMP
SEIC LAMP INDICATION CHOICE

SEIC REQUEST 1/SPLIT SHAFT MODE FOR CUSTOMER INFERRED PARK BRAKE SIGNAL



Upfitter Switch

FORD SUPPLIED COMPONENT

***ENGINE RUNNING/STATIONARY USE ONLY**

12A581 Blunt Cut Circuits

WH / OG CAC11

GY / OG CAC12

Example Schematic

CAC12

GY / OG

(FORD SUPPLIED (In Auxiliary Relay Box)

High Current Battery Junction Box F3 200A

IGNITION HOT-IN-RUN C213 Pin 17 SEIC

CJB F7 5A

Auxiliary Relay Box F5 20A

PTO RELAY

CUSTOMER SUPPLIED HU5T-14B192-FFA RELAY MUST BE USED

CUSTOMER ACCESS INFERRED PARK BRAKE SIGNAL (GROUND)

CE924

BU / BN

12A581 Blunt Cut CAC09

BN / BU

C213

IGNITION HOT-IN-RUN

PCM

17	BN / BU CBA07		
9	BU / GN VMC02	CTO	LSD
7	YE / GN CE912	PTO 1	D/I
8	BU / OG CE933	PTO 2	D/I
		5VDC	
3	WH / BN LE434	PTO VREF	
5	GN /WH VE925	PTO RPM	A/D
4	GY / VT RE327	PTO RTN	
6	BU / WH CE326	PTO RLY	LSD
14	GN / WH CET21	TRO-N	LSD
12	VT / BN CE926	BCP SW	D/I
11	BN CE140	BCP IL	LSD
13	GY / BN CET22	TRO-P	LSD
10	VT / OG VMC05	VSOUT	LSD

INPUT FOR RPM SET POINT

SEE RESISTOR TABLE

SEIC LAMP INDICATION CHOICE

LED

1 K

- OR -

LAMP

GN /WH

PTO LOADS (12V)

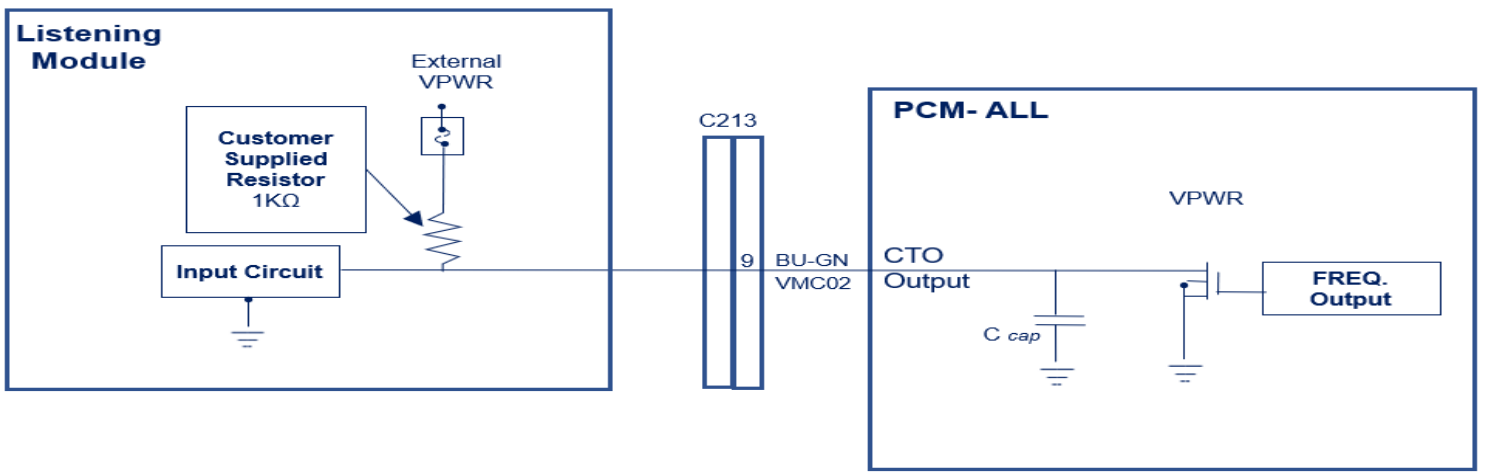
The Power Take Off software in the PCM references the Electric Park Brake PrkBrkStatus CAN signal, where it will only allow Stationary Elevated Idle Control or Split Shaft operation when the Electric Park Brake is "applied". If the Electric Park Brake changes from "applied" to "released" while already in Stationary Elevated Idle Control or Split Shaft operation, the Power Take Off software will abort Stationary Elevated Idle Control/Split Shaft operation and the PTO_RELAY will be deactivated.

The Customer Access "Inferred Park Brake Signal" Ground will only be active when the Electric Park Brake is "applied" and the Power Take Off software is active in Stationary Elevated Idle Control or Split Shaft operation (that is when the PCM PTO_RELAY output is active). The Inferred Park Brake Signal Relay coil shall be powered by the same switch output that goes to the PCM PTO 1 input. The Inferred Park Brake Signal Relay coil shall be grounded by the PCM PTO_RELAY output. The Inferred Park Brake Signal Relay normally open switch shall have one end connected to ground, thus providing the path to ground when this Relay is active.

-Note that when the PTO_RELAY is NOT active, there is no way to infer if the Electric Park Brake is "applied" or "released", therefore the "Inferred Park Brake Signal" Ground Signal should not be used as a decision to request Stationary Elevated Idle Control or Split Shaft.

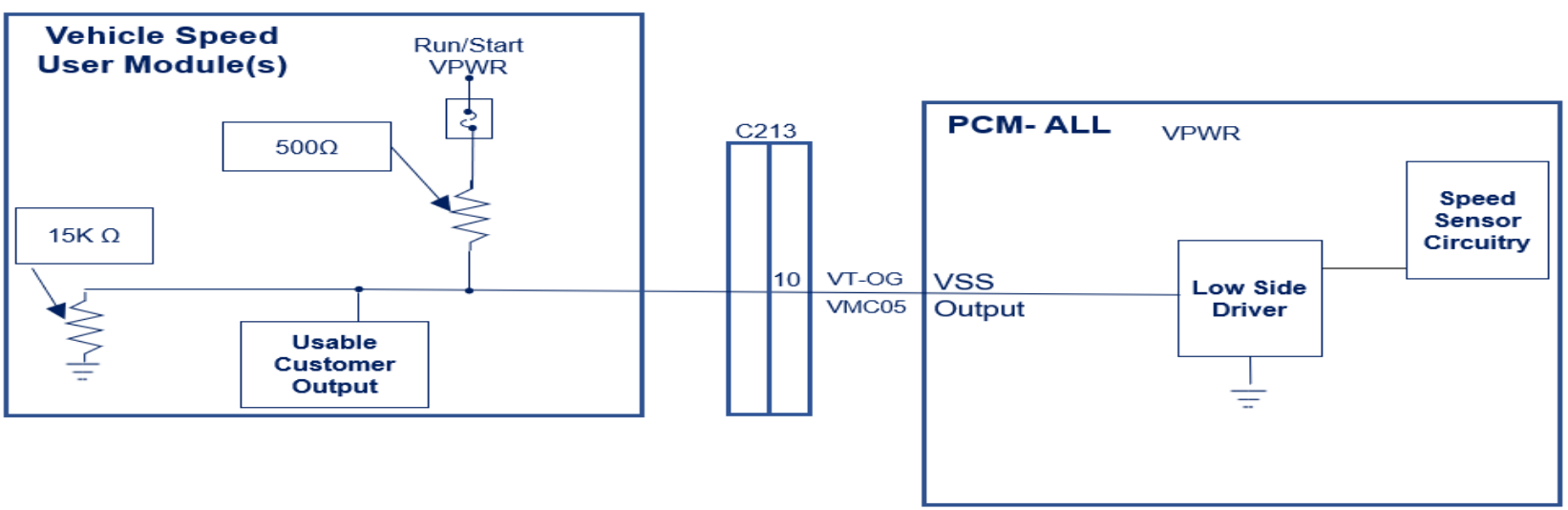
SUPER DUTY
CTO AND VSS CIRCUITS

Clean Tachometer Output (CTO)-- Pull-up Resistor Required



Note* These outputs will not function correctly without the external Load resistors.

Vehicle Speed Signal (VSS) -- Pull-up and Pull-Down Resistor Required



Body Builders Layout Book

SUPER DUTY

SEIC / PTO RESISTOR TABLES 0.10 VOLTAGE INCREMENTS

	PTO_RPM Input Voltage	Resistor Ω	6. 8L & 7.3L GAS			6.7L DIESEL			
			SEIC PTO	Mobile PTO	Mobile PTO	SEIC PTO	Split-Shaft PTO	Mobile PTO	Mobile PTO
			Engine RPM	Engine RPM Speed Limit	Engine Base Idle Speed (Minimum)	Engine RPM	Engine RPM	Engine RPM Speed Limit	Engine Base Idle Speed (Minimum)
Voltage Out-of-Range LOW	0.00	- -	- -	- -	- -	- -	- -	- -	- -
	0.10	- -	- -	- -	- -	- -	- -	- -	- -
	0.20	- -	- -	- -	- -	- -	- -	- -	- -
Voltage Dead Band	0.30	73,633	700	900	750	900	700	- -	750
Usable Voltage Range	0.40	54,050	700	900	750	900	700	- -	750
	0.50	42,300	743	1040	750	953	758	- -	750
	0.60	34,467	785	1180	750	1005	815	- -	750
	0.70	28,871	828	1320	750	1058	873	- -	750
	0.80	24,675	870	1460	750	1110	930	- -	750
	0.90	21,411	913	1600	750	1163	988	- -	750
	1.00	18,800	955	1740	750	1215	1045	- -	750
	1.10	16,664	998	1880	750	1268	1103	- -	750
	1.20	14,883	1040	2020	750	1320	1160	- -	750
	1.30	13,377	1083	2160	750	1373	1218	- -	750
	1.40	12,086	1125	2300	750	1425	1275	- -	750
	1.50	10,967	1168	2440	750	1478	1333	- -	750
	1.60	9,988	1210	2580	750	1530	1390	1530	750
	1.70	9,124	1253	2720	750	1583	1448	1583	750
	1.80	8,356	1295	2860	750	1635	1505	1635	750
	1.90	7,668	1338	3000	750	1688	1563	1688	750
	2.00	7,050	1380	3140	750	1740	1620	1740	750
	2.10	6,490	1423	3280	750	1793	1678	1793	750
	2.20	5,982	1465	3420	750	1845	1735	1845	750
	2.30	5,517	1508	3560	750	1898	1793	1898	750
	2.40	5,092	1550	3700	750	1950	1850	1950	750
	2.50	4,700	1593	3840	750	2003	1908	2003	750
	2.60	4,338	1635	3980	750	2055	1965	2055	750
	2.70	4,004	1678	4120	750	2108	2023	2108	750
	2.80	3,693	1720	4260	750	2160	2080	2160	750
	2.90	3,403	1763	4400	750	2213	2138	2213	750
	3.00	3,133	1805	4540	750	2265	2195	2265	750
	3.10	2,881	1848	4680	750	2318	2253	2318	750
	3.20	2,644	1890	4820	750	2370	2310	2370	750
	3.30	2,421	1933	4960	750	2423	2368	2423	750
	3.40	2,212	1975	5100	750	2475	2425	2475	750
	3.50	2,014	2018	5240	750	2528	2483	2528	750
	3.60	1,828	2060	5380	750	2580	2540	2580	750
	3.70	1,651	2103	5520	750	2633	2598	2633	750
	3.80	1,484	2145	5660	750	2685	2655	2685	750
	3.90	1,326	2188	5800	750	2738	2713	2738	750
	4.00	1,175	2230	5940	750	2790	2770	2790	750
	4.10	1,032	2273	6080	750	2843	2828	2843	750
	4.20	895	2315	6220	750	2895	2885	2895	750
	4.30	765	2358	6360	750	2948	2943	2948	750
	4.40	641	2400	6500	750	3000	3000	3000	750
Voltage Dead Band	4.50	522	2400	6500	750	3000	3000	10000	750
	4.60	409	2400	6500	750	3000	3000	10000	750
Voltage Out-of-Range HIGH	4.70	- -	- -	- -	- -	- -	- -	- -	- -
	4.80	- -	- -	- -	- -	- -	- -	- -	- -
	4.90	- -	- -	- -	- -	- -	- -	- -	- -
	5.00	- -	- -	- -	- -	- -	- -	- -	- -

Ford PRO

Body Builders Layout Book

SUPER DUTY

SEIC / PTO RESISTOR TABLES 100-RPM INCREMENTS

6.8L & 7.3L GAS

Non-Split-Shaft Stationary Elevated Idle Control			Mobile Engine Speed Limit					
Engine Target Speed (RPM)	Resistor (Ohms)	Voltage (Volts)	Engine Target Speed (RPM)	Resistor (Ohms)	Voltage (Volts)	Engine Target Speed (RPM)	Resistor (Ohms)	Voltage (Volts)
700	54,050	0.40	- -	- -	- -	3,600	5,392	2.33
800	32,291	0.64	- -	- -	- -	3,700	5,092	2.40
900	22,293	0.87	- -	- -	- -	3,800	4,809	2.47
1,000	16,550	1.11	- -	- -	- -	3,900	4,542	2.54
1,100	12,822	1.34	- -	- -	- -	4,000	4,289	2.61
1,200	10,207	1.58	- -	- -	- -	4,100	4,050	2.69
1,300	8,271	1.81	- -	- -	- -	4,200	3,823	2.76
1,400	6,780	2.05	- -	- -	- -	4,300	3,608	2.83
1,500	5,596	2.28	1,500	23,662	0.83	4,400	3,403	2.90
1,600	4,634	2.52	1,600	21,411	0.90	4,500	3,209	2.97
1,700	3,836	2.75	1,700	19,491	0.97	4,600	3,023	3.04
1,800	3,164	2.99	1,800	17,834	1.04	4,700	2,846	3.11
1,900	2,590	3.22	1,900	16,390	1.11	4,800	2,677	3.19
2,000	2,094	3.46	2,000	15,119	1.19	4,900	2,515	3.26
2,100	1,661	3.69	2,100	13,993	1.26	5,000	2,360	3.33
2,200	1,281	3.93	2,200	12,988	1.33	5,100	2,212	3.40
2,300	943	4.16	2,300	12,086	1.40	5,200	2,070	3.47
2,400	641	4.40	2,400	11,271	1.47	5,300	1,933	3.54
			2,500	10,531	1.54	5,400	1,802	3.61
			2,600	9,858	1.61	5,500	1,676	3.69
			2,700	9,241	1.69	5,600	1,555	3.76
			2,800	8,674	1.76	5,700	1,438	3.83
			2,900	8,152	1.83	5,800	1,326	3.90
			3,000	7,668	1.90	5,900	1,217	3.97
			3,100	7,220	1.97	6,000	1,113	4.04
			3,200	6,803	2.04	6,100	1,012	4.11
			3,300	6,415	2.11	6,200	914	4.19
			3,400	6,052	2.19	6,300	820	4.26
			3,500	5,711	2.26	6,400	729	4.33
						6,500	641	4.40

6.7L DIESEL

Non-Split-Shaft Stationary Elevated Idle Control			Split-Shaft Stationary Elevated Idle Control			Mobile Engine Speed Limit		
Engine Target Speed (RPM)	Resistor (Ohms)	Voltage (Volts)	Engine Target Speed (RPM)	Resistor (Ohms)	Voltage (Volts)	Engine Target Speed (RPM)	Resistor (Ohms)	Voltage (Volts)
- -	- -	- -	700	54,050	0.40	- -	- -	- -
- -	- -	- -	800	36,247	0.57	- -	- -	- -
900	54,050	0.40	900	26,724	0.75	- -	- -	- -
1,000	35,098	0.59	1,000	20,795	0.92	- -	- -	- -
1,100	25,391	0.78	1,100	16,748	1.10	- -	- -	- -
1,200	19,491	0.97	1,200	13,810	-1.27	- -	- -	- -
1,300	15,525	1.16	1,300	11,580	-1.44	- -	- -	- -
1,400	12,677	1.35	1,400	9,830	-1.62	- -	- -	- -
1,500	10,531	1.54	1,500	8,419	-1.79	1,500	10,531	1.54
1,600	8,858	1.73	1,600	7,258	-1.97	1,600	8,858	1.73
1,700	7,515	1.92	1,700	6,286	2.14	1,700	7,515	1.92
1,800	6,415	2.11	1,800	5,460	2.31	1,800	6,415	2.11
1,900	5,496	2.30	1,900	4,749	2.49	1,900	5,496	2.30
2,000	4,718	2.50	2,000	4,132	2.66	2,000	4,718	2.50
2,100	4,050	2.69	2,100	3,590	2.83	2,100	4,050	2.69
2,200	3,471	2.88	2,200	3,111	3.01	2,200	3,471	2.88
2,300	2,963	3.07	2,300	2,684	3.18	2,300	2,963	3.07
2,400	2,515	3.26	2,400	2,301	3.36	2,400	2,515	3.26
2,500	2,116	3.45	2,500	1,956	3.53	2,500	2,116	3.45
2,600	1,759	3.64	2,600	1,644	3.70	2,600	1,759	3.64
2,700	1,438	3.83	2,700	1,359	3.88	2,700	1,438	3.83
2,800	1,147	4.02	2,800	1,099	4.05	2,800	1,147	4.02
2,900	883	4.21	2,900	861	4.23	2,900	883	4.21
3,000	641	4.40	3,000	641	4.40	3,000	641	4.40

Body Builders Layout Book

SUPER DUTY

FORD CO-PILOT360™ TECHNOLOGY

Ford Co-Pilot360™
Ford Co-Pilot360 Technology is a collection of advanced driver-assist features designed to help drivers feel confident and in command on the road. These smart features can help drivers be more aware of their surroundings, provide alerts about surprises on the road and help to avoid potential collisions while navigating the road ahead. This brand represents the growing collection of Ford driver-assist features, available in branded packages or individually, on select vehicles across the Ford lineup.

- Ford Co-Pilot360:
  - Auto High-Beam Headlamps
  - BLIS (Blind Spot Information System) with Cross-Traffic Alert
  - Lane-Keeping System: Lane-Keeping Alert, Lane-Keeping Assist and Driver Alert
  - Pre-Collision Assist with Automatic Emergency Braking (AEB)
  - Rear Cross Traffic Braking
  - Rear View Camera
- Ford Co-Pilot360 2.0
  - Auto High-Beam Headlamps
  - BLIS with Cross-Traffic Alert
  - Lane-Keeping System
  - Pre-Collision Assist with AEB
  - Post Collision Braking
  - Rear View Camera
  - Reverse Brake Assist
  - Reverse Sensing System

(NOTE: Specific features vary by vehicle and trim, or series level. Consult the vehicle Product Order Guide)

CHASSIS CAB:

- XL / XLT / LARIAT – Trim Series
  - Audible Lane Departure Warning [Front Windshield Camera Equipped]
  - Autolamp – Auto On/Off Headlamps [Front Windshield Camera Equipped]
  - Cruise Control (Steering wheel-mounted)
  - Pre-Collision Assist (PCA) with Automatic Emergency Braking (AEB) [Front Windshield Camera Equipped]

(NOTE: Chassis Cabs not equipped with bumper mounted radar system)

PICKUP:

- XL Trim
  - Autolamp (Auto On/Off Headlamps)
  - Cruise Control [Front Windshield Camera and bumper mounted Radar system equipped]
  - Hill Start Assist
- XLT Trim
  - Autolock, Auto unlock
  - Automatic High Beam
  - Pre -Collision Assist with Automatic Emergency Braking (AEB) and Forward Collision Warning [Front Windshield Camera and bumper mounted Radar system equipped]
- LARIAT Trim
  - 360-Degree Camera Package [Front Windshield Camera equipped]
  - BLIS® with Cross-Traffic Alert and Trailer Coverage (BLIS® sensor in taillamp)
  - Reverse Brake Assist
  - Rear Parking Sensors

On all 2023MY Super Duty that have Lane Departure Warning or Pre-Collision Assist features, they can be turned off via steering wheel button or Driver Assistance Menu in SYNC, respectively.

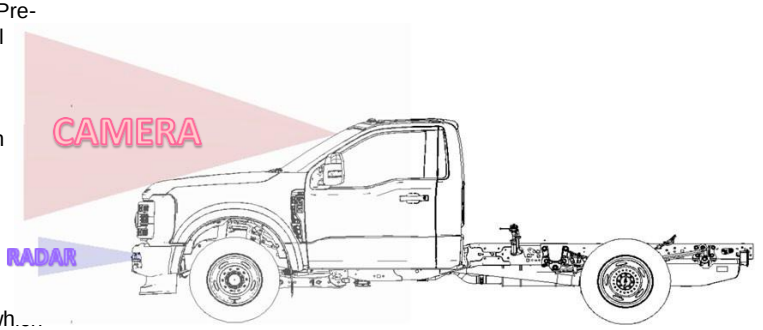
These selections would latch over key cycle.
Note, the driver will be prompted in the cluster to turn Pre-Collision Assist back on or leave it off at every key cycle.

IMPORTANT

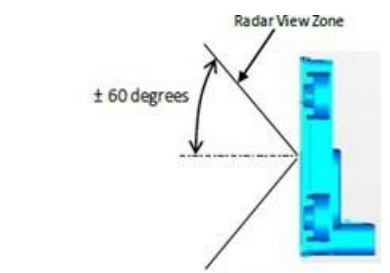
- Not recommend relocating camera or radar
- ADAS hardware cannot be added to vehicle post production.
- Verify location when using aftermarket hood mounted mirrors wh... could possibly interfere with camera “field of view”
- Not recommend equipping vehicles with winch systems, cones, cables, license plates (center) which could possibly obstruct/interfere with radar and camera “field of view”
- Not recommend applying paint or decals to radar or cover which could possibly obstruct/interfere radar field of view
- Not recommend applying decals or objects to the front of windshield which could possibly obstruct/interfere camera “field of view.” Over roof systems that extend forward of windshield ensure that it does not interfere with camera “field of view”.
- Not recommend using aftermarket suspension components (e.g. Adding air ride, helper springs, lift kits, etc.) Which could possibly obstruct/interfere radar and camera field of view zones
- Not recommend using front bumper system to push other objects/vehicles this is to prevent any damage or misalignment to radar and cover.
- Not recommend modifying or replacing factory equipped bumper with aftermarket sourced bumpers which may interfere with radar “field of view”.
- If the camera or radar is blocked due to accumulation of dirt, ice, or snow in “field of view” - vehicle will display blockage message in cluster. Once blockage is removed, blockage message will stop being displayed
- Snowplow equipped vehicles will have a feature in cluster to turnoff ADAS.

Installed upfitter equipment should not infringe on the radar or camera view zones. The CAD files of the radar and camera view zones are available upon request via the Ford BBAS web site https://www.fordpro.com/en-us/upfit/contact-us/

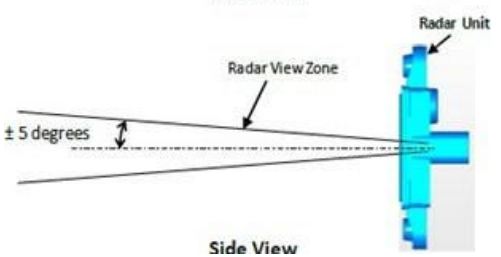
CAMERA - ‘FIELD OF VIEW’ (CAD File: FNA7140171)



RADAR - FIELD OF VIEW’ (CAD File: FNA6220214)



Plan View



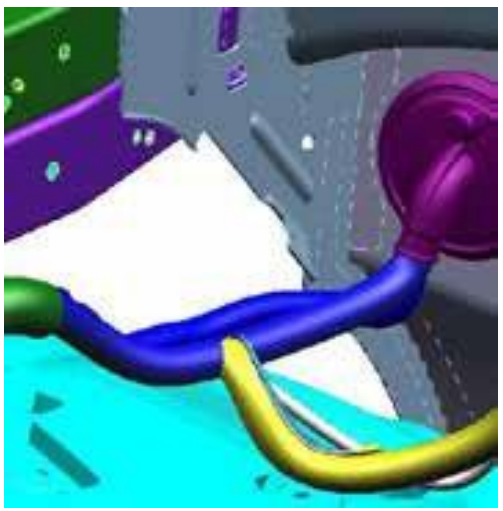
Side View

SUPER DUTY
CUSTOMER ACCESS CIRCUITS

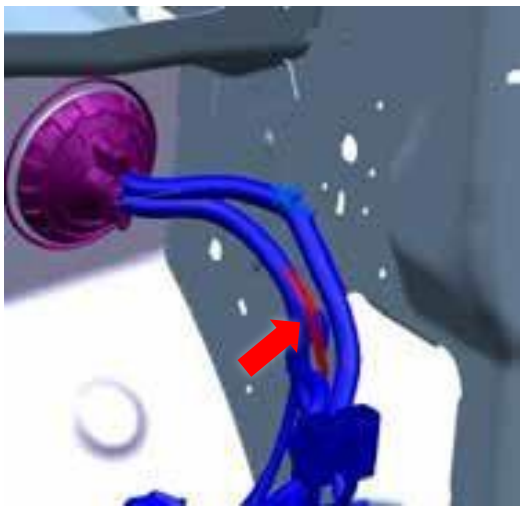
Ford Super-Duty trucks are provided with several types of Customer Access Circuits to accommodate various electrical access and control functionalities.

PASS-THROUGH WIRES
All Super-Duty trucks come standard with a 4-wire bundle that is pre-routed through a grommet in the dash panel to provide a pathway between the cabin interior and the underhood compartment (engine bay). This pass-through harness has blunt-cuts on both ends. The in-cab blunt-cuts are located behind the interior trim side kick panel in the front passenger footwell. The underhood blunt-cuts are located on the passenger side just forward of the dash panel harness grommet. It may facilitate access to the underhood end of the pass-through wires by removing the front right wheel/tire and wheel arch liner.

PASS-THROUGH WIRES	WIRE COLOR
WIRE 1	BN-BU
WIRE 2	WH
WIRE 3	WH / OG
WIRE 4	GY / OG



UNDERHOOD
(PASSENGER SIDE)



FRONT FOOTWELL
(PASSENGER SIDE)

CUSTOMER ACCESS AT UPFITTER RELAY BOX
There are 4 customer-access blunt-cut circuits (14-gage), located under the Upfitter Relay Box in the engine bay in the same wire bundle as the 6 upfitter switch blunt-cuts, available for the following functions:

- Run / Start
- Battery Hot
- PTO Relay Output
- PTO Relay Control

See the Upfitter Relay Box section of this BBLB for more detailed information.

UPFITTER RELAY BOX / UPFITTER SWITCHES
A 6-pack of Upfitter Switches are optionally available on all Super-Duty trucks. This feature provides a bank of 6 switches on the overhead center console in the cabin. These switches are pre-wired to the Upfitter Relay Box (with 6 blunt-cut output wires) located underhood on the passenger side. The Upfitter Switches, in conjunction with the Upfitter Relay Box, can be configured by the upfitter to control various upfitter-installed equipment. See the Upfitter Relay Box and Upfitter Switches sections elsewhere in this BBLB for more detailed info.

SEIC / PTO / CUSTOMER ACCESS HARNESS WITH BLUNT-CUTS
A connector is provided (with a mating blunt-cut harness) on all Super-Duty trucks, located behind the side kick panel in the passenger foot well, to allow control of the PTO system as well as access to 6 other vehicle system signal outputs. See the SEIC / PTO section of this BBLB for more details.

SUPER DUTY

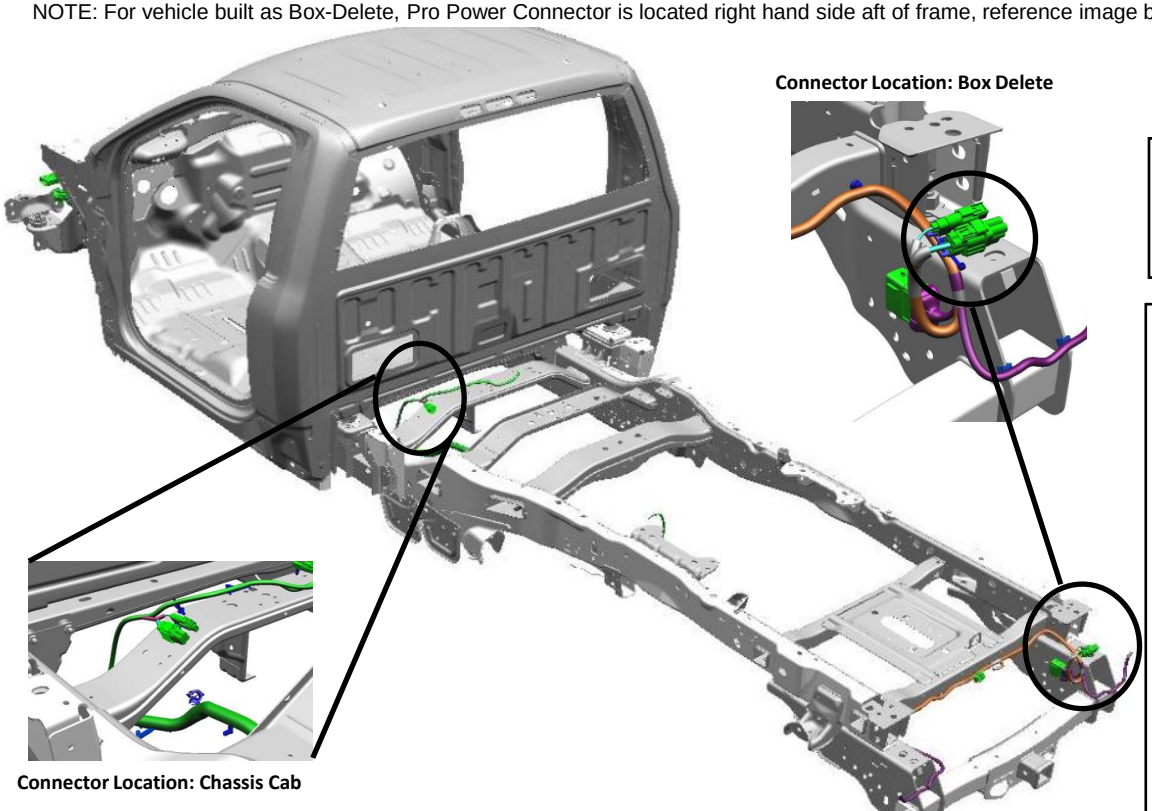
PRO POWER ONBOARD FOR INCOMPLETE VEHICLES

PRO POWER ONBOARD

- A cab outlet is installed in the Passenger seat pedestal.
- An auxiliary outlet and fasteners are provided in dunnage to be installed in the Second Unit Body.
  - Do not cover warning labels.
  - The aux outlet is water resistant but should be installed such that it is protected from direct spray or flow of water.
  - The aux outlet should be installed on a substantially vertical surface.
  - The aux outlet should not be installed near any significant source of heat.
  - The aux outlet has a ~350mm wiring pigtail. The included retaining clip may be carefully removed from the wiring if desired.
  - Attach the aux outlet to the SUB utilizing all four mounting holes. Please note the 2.5 mm gap between the back side of the outlet and the mounting plane (see Section A-A) that must be filled to prevent a "soft" joint or potential damage to the housing.
  - If using the provided fasteners, see the "Aux Outlet Mating Surface" info for panel thickness and hole requirements, there is also a printable template in the kit instructions. M6 or ¼" washers (~1.6 mm thick, not provided) can be used between the U-nuts and outlet housing to fill the remaining gap. Torque screws to 12 +/- 1.8 Nm.
  - If using fasteners other than those provided, the mating panel thickness, hole requirements, spacer strategy and torque specification (if applicable) are at the manufacturer's discretion.
  - In case the auxiliary outlet is not planned to be installed (either the aux outlet cannot be packaged in the SUB or is not desired by the customer), the Pro Power Onboard feature will function as delivered from the factory with the cab outlet only.
- A 6m (18 ft) extension wiring harness is also provided in dunnage to allow flexibility in placement of the auxiliary outlet. The aux outlet pigtail can also connect directly to the chassis wiring if preferred.
  - The wiring connectors are sealed and do not need special protection from the elements.
  - Best practices for wire routing and retention should be followed, see the Ford General Body Builder Layout Book for more information.
- Chassis wiring connectors for the auxiliary outlet are located near the LH frame rail at back of cab. These connectors have sealed caps which should remain in place until the aux outlet is plugged in (directly or via extension harness) to prevent contamination and potential shock hazard. The vehicle should be in the "key off" state when removing the sealed caps from the chassis wiring and connecting the extension harness and aux outlet pigtail.

  NOTE: If the auxiliary outlet is connected to the vehicle and later removed, the vehicle wiring connectors must be sealed before the vehicle re-enters service.

  NOTE: For vehicle built as Box-Delete, Pro Power Connector is located right hand side aft of frame, reference image below.



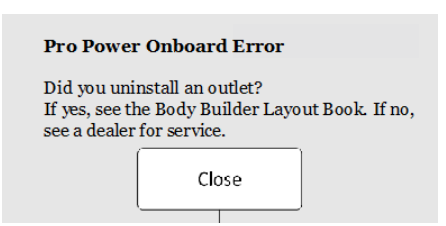
Connector Location: Box Delete

Connector Location: Chassis Cab

NOTE: REMOVAL OF THE FEAD MOUNTED GENERATOR USED BY THE PRO POWER ONBOARD FEATURE IS NOT SUPPORTED. The vehicle electrical system cannot be configured to disable the Pro Power Onboard feature nor for the generator to be replaced by other FEAD mounted equipment (e.g. an additional alternator).

NOTE: the error message shown below may appear if:

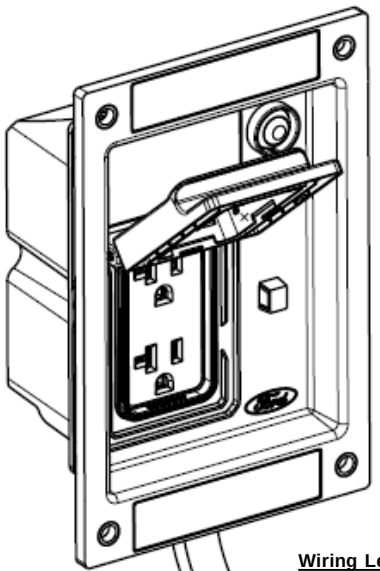
- One of the outlets has been disconnected intentionally – The message will appear for 3 key cycles during which time the PPO system will not be functional. Starting with the 4th key cycle, the system will operate normally with the remaining outlet only. The disconnected outlet can be reconnected at any time and the system will adapt.
- There is a fault somewhere in the PPO system – If nothing was disconnected intentionally, please contact a Ford dealer for service. The message will appear for 3 key cycles however the fault will persist after that time. If the fault is isolated to just one of the outlets, the LED on that outlet will continue to blink while the PPO system may return to normal function (with the remaining outlet only) starting on 4th key cycle.


Pro Power Onboard Error
Did you uninstall an outlet?
If yes, see the Body Builder Layout Book. If no, see a dealer for service.
Close

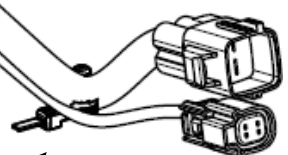
Body Builders Layout Book

SUPER DUTY

PRO POWER ONBOARD AUXILIARY OUTLET

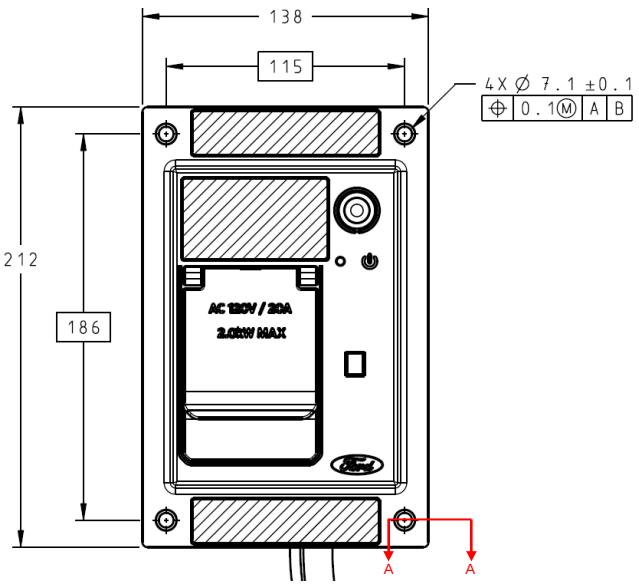


Wiring Length from tip of Strain Relief (+/- 10mm):
to Clip – 220mm
to Power Connector – 340mm
To Signal Connector – 350mm

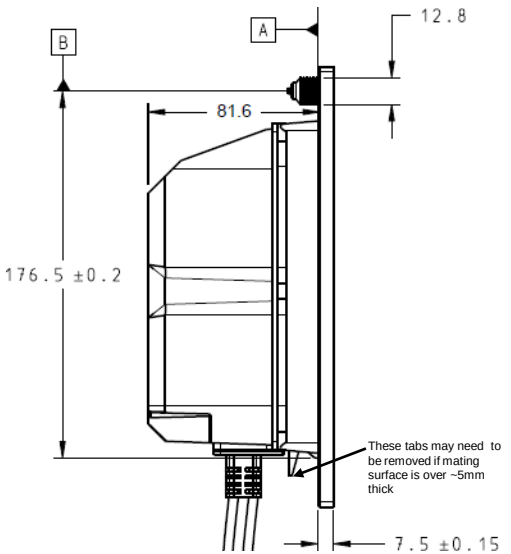


Wiring Clip Mating Surface

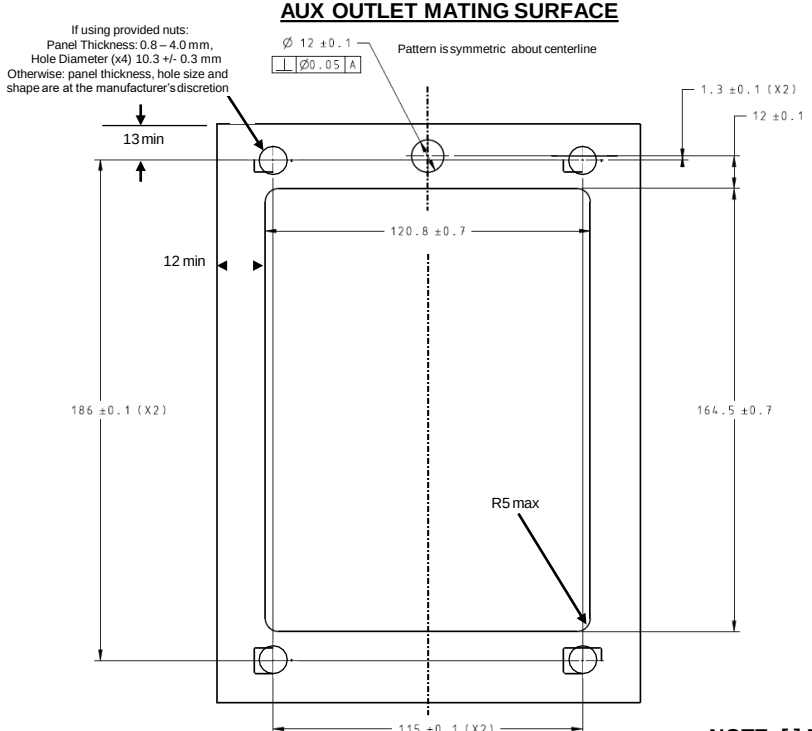
Ø8.0 +0.2 /- 0.4mm



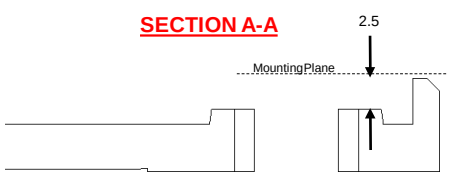
AUX OUTLET SIDE VIEW



AUX OUTLET MATING SURFACE



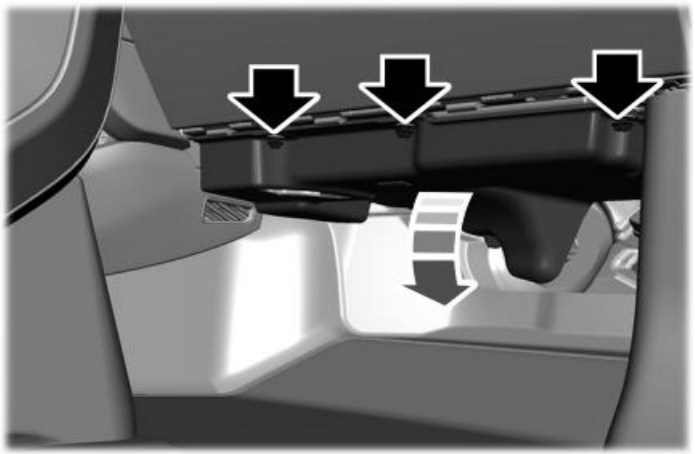
SECTION A-A



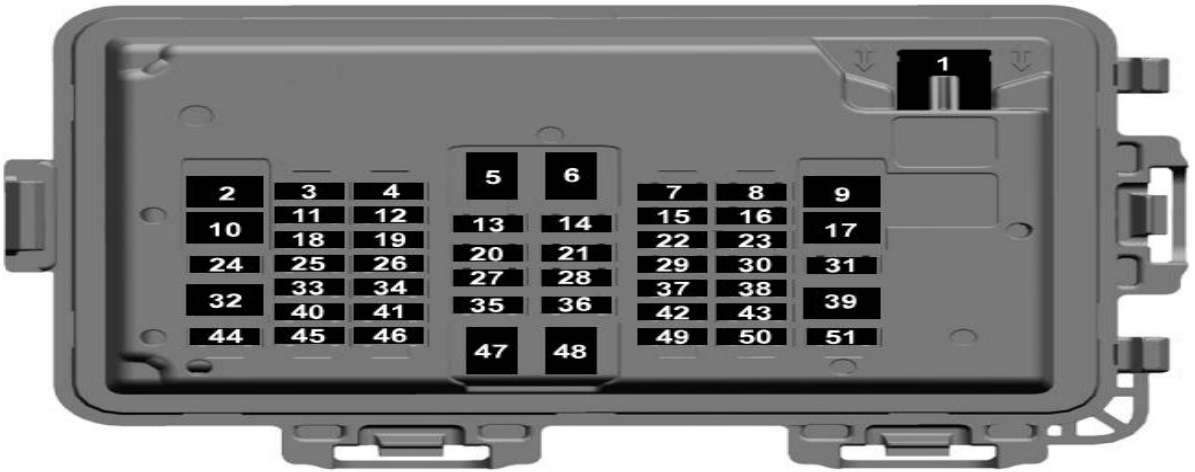
ALL DIMENSIONS IN MM

NOTE- [ ] DIMENSION ARE INCHES

SUPER DUTY
INTERIOR FUSE BOX LAYOUT



Passenger Side



FUSE NUMBER	FUSE RATING	PROTECTED COMPONENT
1	30 A	POWER WINDOWS
2	30 A	POWERED TAILGATE MODULE
3	30 A	PASSENGER DOOOR MODULE.
4	15 A	MULTI-CONTOUR SEATS
7	20 A	ADVANCE DRIVER ASSISTANCE MODULE
8	10 A	DELAYED ACCESORY LOGIC
11	5 A	INSTRUMENT CLUSTER
14	10 A	SYNC
15	5 A	CENTER HIGH MOUNT STOP LAMP CAMERA
18	10 A	FOUR WHEEL DRIVE SWITCH, RADIO TRANSCEIVER GATEWAY
20	5 A	INVERTER
21	5 A	UPFITTER SWITCH
22	10 A	AUXILARY CAMERA
24	30 A	MOONROOF
26	5A	NEAR FIELD COMMUNICATION MODULE
27	5 A	TRAILER BRAKE CONTROL SWITCH
28	5 A	ELECTROCHROMATIC MIRROR
29	5 A	HEATIN, VENTILATION, A/C
33	7.5 A	BRAKE ON/OFF SWITCH
34	7.5 A	STEERING COLUMN CONTROL MODULE, INSTRUMENT CLUSTER

FUSE NUMBER	FUSE RATING	PROTECTED COMPONENT
35	5 A	REAR HEATED SEATS
36	7.5 A	MANUAL SHIFT
37	5 A	HEADS UP DISPLAY
38	7.5 A	TELEMATICS MODULE.
40	10 A	LEFT DOOR SWITCH, TELESCOPIC MIRROR SWITCH
41	10 A	ADJUSTABLE PEDALS
42	5 A	CENTRAL SECURITY MODULE.
43	5 A	HEADLAMPS, IGNITION SWITCH
44	30 A	DRIVER DOOR MODULE
45	7.5 A	WIRELESS ACC CHARGER, DRIVER FRONT SEAT MODULE
46	20 A	RADIO
49	10 A	SYNC DISPLAY SCREEN
50	5 A	AUXILARY SMART DATA LINK CONNECTOR.
51	—	NOT USED.

NOTE: SPARE FUSE AMPERAGE MAY VARY.

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Body Builders Layout Book

SUPER DUTY

POWER DISTRIBUTION BOX (PDB) / HIGH CURRENT FUSE BOX (HCFB) FUSE LAYOUT

Fuse Location.	Size	Type	Function Name
1	50A	JCASE	COOLING FAN (GAS ONLY)
2	50A	M CASE	PTC BANK 2 (DIESEL ONLY)
3	50A	M CASE	PTC BANK 1(DIESEL ONLY)
4	50A	M CASE	PTC BANK 3 (DIESEL ONLY)
9	30A	M CASE	4X4 M ODULE
10	30A	M CASE	CNG SWITCHED (GAS ONLY)
11		NO CONNECT	
12	60A	M CASE	ABS PUM P
13	30A	M CASE	PASSENGER POWER SEAT MODULE
14	40A	M CASE	ABS VALVE
15	30A	M CASE	RP2
20		NO CONNECT	
21	10A	M ICRO	TRAILER BACKUP LAM PS
22		NO CONNECT	
23	20A	M ICRO	VPWR1
24	20A	M ICRO	VPWR2 (GAS)
	10A	M ICRO	VPWR2 (DIESEL)
25	15A	M ICRO	VPWR3 (GAS)
	10A	M ICRO	VPWR3 (DIESEL)
26	20A	M ICRO	VPWR4
27	10A	M ICRO	VPWR5 (GAS)
	20A	M ICRO	VPWR5 (DIESEL)
28		NO CONNECT	
29	15A	M CASE	UREA TANK HEATER (DIESEL ONLY)
30	15A	M CASE	UREA LINE HEATER (DIESEL ONLY)
31	15A	M CASE	GLOW DOSING M ODULE (DIESEL ONLY)
34	20A	M ICRO	REAR HEATED SEATS
35		NO CONNECT	
36	30A	M CASE	CLIM ATE SEATS POWER
37	5A	M ICRO	24V ALTERNATOR R/ S
38	10A	M ICRO	PCM / TCM R/ S
39	10A	M ICRO	ABS R/ S
40	10A	M ICRO	eRCB R/ S
41	10A	M ICRO	BLIS M ODULES, TTPM S, REM OTE CAN R/ S
42	10A	M ICRO	SNOWPLOW R/ S
43	15A	M ICRO	INTERIOR PDB R/ S
44		NO CONNECT	
45	15A	M ICRO	HEATED STEERING WHEEL
46	20A	M ICRO	SPARE
47	5A	M ICRO	SPARE
48	30A	M ICRO	AM PLIFER
49	25A	M ICRO	SPARE
50		NO CONNECT	
51	40A	JCASE	HVAC BLOWER M OTOR
52	10A	M ICRO	4X4 VACUUM SOLENOID
53	10A	M ICRO	4X4 - TCCM
54	10A	M ICRO	SPARE

Fuse Location	Size	Type	Function Name
55	10A	M ICRO	SPARE
56	40A	M CASE	eRCB POWER
57	20A	M CASE	TRAILER TOW LIGHTING M ODULE
58	50A	M CASE	CUSTOMER MODULE 1
59	60A	M CASE	400W INVERTER
60	60A	JCASE	INTERIOR PDB POWER
61	30A	M CASE	VBATT2
62	5A	M ICRO	SM ART TRAILER HITCH
63	10A	M ICRO	ECG
64	5A	M ICRO	GLOW PLUG RELAY COIL
65	10A	M ICRO	CNG B+
66		NO CONNECT	
67		NO CONNECT	
68		NO CONNECT	
69		NO CONNECT	
70		NO CONNECT	
74	30A	M CASE	TRAILER BRAKE CONTROL/ AFTER M ARKET E-BRAKE ACCESS
75	30A	M CASE	CNG RELAY
76	25A	M CASE	TRAILER BATTERY CHARGE
77	30A	M CASE	VBATT1
78	20A	M CASE	POWER POINT 2
79	20A	M CASE	POWER POINT 1
80		NO CONNECT	
81		NO CONNECT	
82		NO CONNECT	
83		NO CONNECT	
84	20A	M ICRO	HORN
85	40A	M CASE	HEATED BACKGLASS (GAS ONLY, DIESEL IS FET)
86		NO CONNECT	
87		NO CONNECT	
88		NO CONNECT	
91	5A	M ICRO	HCM
92	15A	M ICRO	LH HEADLAM P
93	15A	M ICRO	RH HEADLAM P
94	20A	M ICRO	POWER POINT 3
95	20A	M ICRO	POWER POINT 4/ SM ART CHARGE M ODULE
96		NO CONNECT	
97		NO CONNECT	
98	10A	M ICRO	TAILGATE RELEASE SOLENOID
99		NO CONNECT	
100		NO CONNECT	
101	50A	M CASE	CUSTOMER MODULE 2
102	5A	M ICRO	RAIN SENSOR
103	30A	M CASE	FRONT WIPER M OTOR
104		NO CONNECT	
105	30A	M CASE	FUEL PUM P
106	30A	M CASE	RP1
107	25A	M ICRO	TRAILER PARK LAM PS
108	40A	M CASE	DRIVER POWER SEAT
109	30A	M CASE	STARTER M OTOR SOLENOID
110		NO CONNECT	
111	30A	M CASE	POWER SLIDING WINDOW

HIGH CURRENT FUSES NOW INTEGRATED TO UNDERHOOD PDB

Fuse Location	Size	Type	Function Name
1	275A	ZCASE	PRIMARY ALTERNATOR
2	275A	ZCASE	SECONDARY ALTERNATOR
3	200A	ZCASE	UPFITTER RELAYS FEED
4	100A	ZCASE	GLOW PLUGS

SUPER DUTY
REAR-VIEW CAMERA PREP KIT

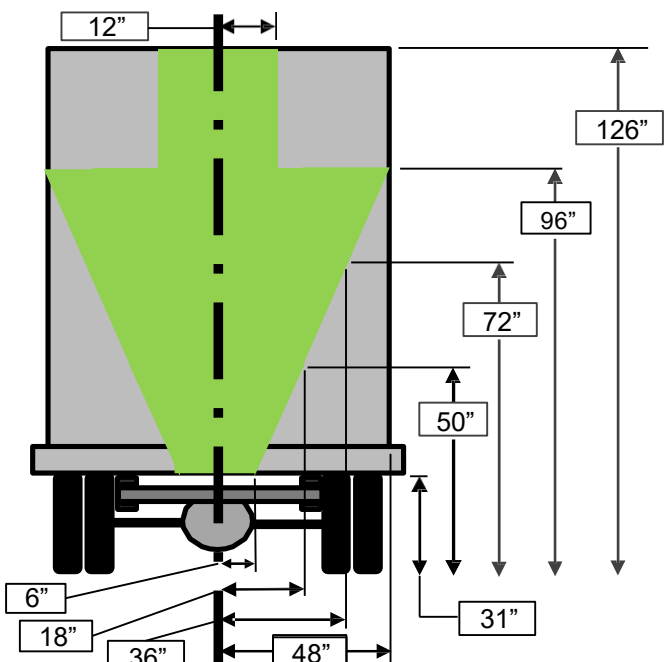
All vehicles (GVWR 10,000 lbs and under) completed in 2 or more stages (i.e., produced by Ford as incomplete vehicles) are required to comply with FMVSS 111 requirements for rear visibility (including rear-view camera). FMVSS 111 requirements only affect vehicles 10,000 lbs GVWR or less. This information is being provided to assist upfitters who are completing Super-Duty Chassis Cabs vehicles comply with FMVSS 111 rear-view camera requirements using the available Ford reverse-camera kit.

REAR-VIEW CAMERA PREP KIT (Order Code 872) - Required option on 10,000lbs GVWR and less
A rear-view camera and prep kit for incomplete vehicles is available as an orderable option with all Chassis Cab incomplete vehicles. The optional Prep kit is available with the following displays :

VEHICLE	TRIM LEVEL	DISPLAY	
		8 in. Base	12 in. Base
CHASSIS CAB	XL	S	N/A
	XLT	S	N/A
	LARIAT	N/A	S

S - STANDARD / O - OPTIONAL

REAR-VIEW CAMERA SERVICE KIT (SERVICE PART # JC3Z-19G490-H)
A service kit is also available through Ford Service. This service kit is compatible with all chassis cab vehicles. Vehicles ordered with the base audio package will have a display in the center stack.



https://www.fordpro.com/en-us/upfit/publications/

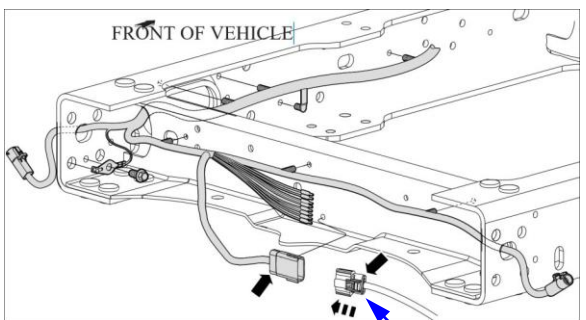
For a chassis cab camera kit installed post-production, a Ford Diagnosis and Repair System (FDRS) tool is required to make the parameter change needed to activate the service kit camera / display.

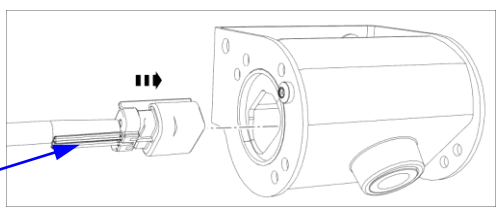
FORD CAMERA KIT COMPLIANCE CAPABILITY
Ford has tested the rear-view camera kit in combination. The camera / display pairing can meet the backup camera portion of FMVSS 111 when mounted in the zones defined below.

Compliance to FMVSS 111 is the responsibility of the upfitter who alters the vehicle. This information is provided for directional purposes only, based on testing done by Ford.

If equipped with a display, the camera included in kit is capable of complying with FMVSS 111 field-of-view requirements when mounted in the areas defined in the figure below

Instructions for enabling the camera / display are available at the following link:
http://www.fordservicecontent.com/ford_content/catalog/accessory_files/2020_P558_Rear_Camera_Kit_Enable_Disable.pdf

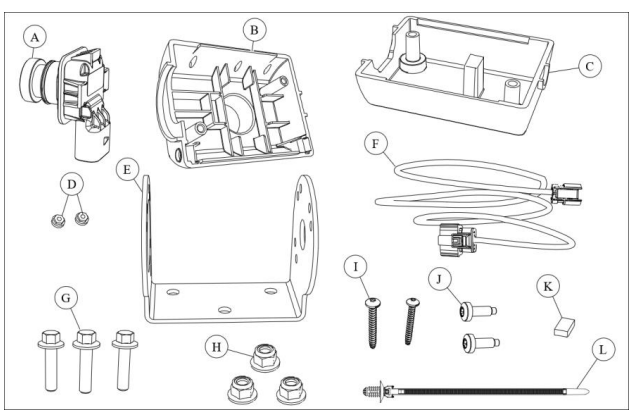




ITEM F – WIRE HARNESS

REAR-VIEW CAMERA SERVICE KIT

Item	Qty	Description
A	1	Rear-view Camera
B	1	Front Camera Case Half
C	1	Rear Camera Case Half
D	2	Screw Retaining Nuts
E	1	Mounting Bracket
F	1	Wire Harness
G	3	Bolts
H	3	Nuts
I	2	Screws (longer)
J	2	Screws (shorter)
K	1	Foam Pad
L	1	Push-pin Tie Strap



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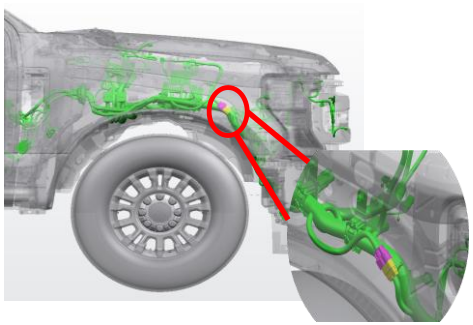
SUPER DUTY

SNOWPLOW CIRCUIT INFORMATION



CIRCUITS ON THIS CONNECTOR ARE COMING FROM THE BCM
CNUM: C11-S1-PJ
Connector #: 6U5T-14A464-JA

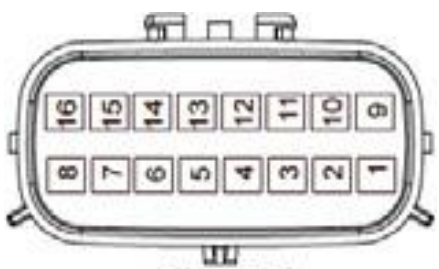
CAVITY	CIRCUIT	CIRCUIT DESCRIPTION	OPTION
1	GD131	Right Ground	N/A
2	-	-	-
3	-	-	-
4	-	-	-
5	CLF05	RF Low Beam	N/A
6	CLF04	LF Low Beam	N/A
7	CLF03	RF High Beam	N/A
8	CLF02	LF High Beam	N/A
9	GD129	Left Ground	N/A
10	-	-	-
11	-	-	-
12	-	-	-
13	CDP03	Snow Plow Run-Start	N/A
14	CLS77	Park Lamps	N/A
15	CLS25	RF Turn	N/A
16	CLS21	LF Turn	N/A

MATING CONNECTOR GOING TO LIGHTING /UPfiTTER FUNCTIONS
CNUM: C11-S2-PJ
Connector #: 4L3T-14A624-XB

CAVITY	CIRCUIT	CIRCUIT DESCRIPTION	OPTION
1	-	-	-
2	-	-	-
3	-	-	-
4	-	-	-
5	CLF05	RF Low Beam	N/A
6	CLF04	LF Low Beam	N/A
7	CLF03	RF High Beam	N/A
8	CLF02	LF High Beam	N/A
9	-	-	-
10	-	-	-
11	-	-	-
12	-	-	-
13	-	-	-
14	-	-	-
15	-	-	-
16	-	-	-

- 23MY Super Duty does not have dual headlamp bulbs. The pins used are now the same across all headlamp types.
- In order to protect wiring (both power and ground), use less than 8.8A (the derated value of the 10A snowplow run-start fuse) on PIN 13.

C11-S1-PJ
6U5T-14A464-JA



C11-S2-PJ
4L3T-14A624-XB

LIGHTS CONTROLLED BY HEADLAMP SWITCH
The headlamp switch used on the Super Duty F-Series vehicles is a switch that communicates with the Body Control Module (BCM) via a Local Interconnect Network (LIN) connection to activate all exterior lighting. For halogen lamp vehicles, the left-hand and right-hand high- and low-beam headlamps are controlled individually by field-effect transistors (FETs) in the BCM.

For LED lamp vehicles, the left-hand and right-hand high- and low-beam headlamps are controlled individually by FETs in the BCM that interface with a module integrated in the headlamp assembly. Daytime Running Lamps (DRL) and park lamps are driven from the same circuit, so there is another LIN communication connection between the BCM and headlamps to control those individually.

Lamp outage is controlled by a dedicated circuit between the lamp assemblies and the BCM. A connection to any circuit in the system controlled by the headlamp switch must be done using an auxiliary relay. Any connection must be performed on the lighting output of the BCM.

Additional loads connected to the headlamp switch will damage the headlamp switch.

SUPER DUTY
REAR LIGHTING CIRCUITS

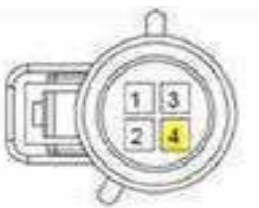
NOTE: For information regarding Pickup Box Removal, please see the separate Pickup Box Removal Body Builder Layout Book.

TAILLAMP CONFIGURATION - CHASSIS CAB AND PICKUP BOX DELETE

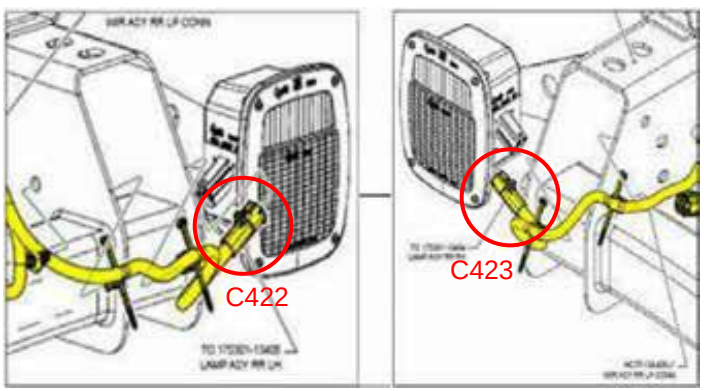
vehicles are provided with combined Stop/Turn circuits with Pulse Width Modulation (PWM) power supply and bulb outage detection enabled. This configuration is intended for incandescent lamps. These circuits are controlled by a Field-Effect Transistor (FET) with a maximum output of 2.9A.

TAILLAMP PINOUTS - CHASSIS CAB AND BOX DELETE

		LH Lamp Connector C423		RH Lamp Connector C422	
Circuit Description	Pin #	Circuit Name	Wire Color	Circuit Name	Wire Color
Reverse	1	CLS10	GN/WH	CLS10	GN/WH
Ground	2	GD476	BK/WH	GD476	BK/WH
Park Lamps	3	CLS77	BU/WH	CLS77	BU/WH
Stop/Turn	4	CLS23	GY/YE	CLS27	GN-OG



F3LB-14A624-GB



TAILLAMP CIRCUITS FOR SEPARATE STOP AND TURN LAMPS – CHASSIS CAB AND PICKUP BOX DELETE

Some upfits require separate stop and turn signals. In those situations, use circuits CLS23 and CLS27 for the LH and RH Turn signals (see above for circuit identification), use the CHMSL circuit (see right for details) to feed the LH and RH Stop signals. A Ford Diagnosis and Repair (FDRS) tool is needed to reconfigure circuits CLS23 and CLS27 from “STOP/TURN” to “TURN ONLY”, see the following page for details.

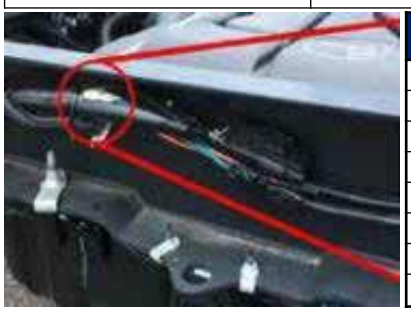
TAILLAMP CIRCUITS FOR LED LAMPS – CHASSIS CAB AND PICKUP BOX DELETE

If LED rear lamps are planned for the completed vehicle, a Ford Diagnosis and Repair System (FDRS) tool is required to deactivate bulb outage, which also revises the power supply type to Direct Current. See the following page for details.

CHMSL CIRCUIT ACCESS FOR ADDITIONAL CHMSL OR STOP TAILLAMP FUNCTION - ALL SUPER DUTY

A CHMSL circuit takeout is provided at the end of the frame on all Super Duty trucks on the left-hand side, in addition to the feed provided as part of the Customer Access Circuits located in the vehicle cab behind the passenger-side kick panel. This is a FET controlled output limited to 5A.

PROTECTED FEEDS WIRE COLOR	CIRCUIT NO.	CIRCUIT INTENT	DESCRIPTION
VIOLET / GREEN (CC) VIOLET / WHITE (Pickup)	CCB08	Service Brake Signal Output	Underhood PDB C1PDB01 PIN 10 Intended for upfitter added CHMSL. Blunt cut wire tapes to harness at rear of frame on Left hand side



WIRE COLOR	DESCRIPTION
BU	TRAILER-BRAKE CONTROL MODULE OUTPUT
GY / BN	BACK-UP LAMPS
BK	GROUND
VI	HIGH-MOUNT STOP LAMP
YE	LEFT-HAND STOP / TURN
GN	RIGHT-HAND STOP / TURN
OG	BATTERY CHARGE
BN	PARK LAMPS

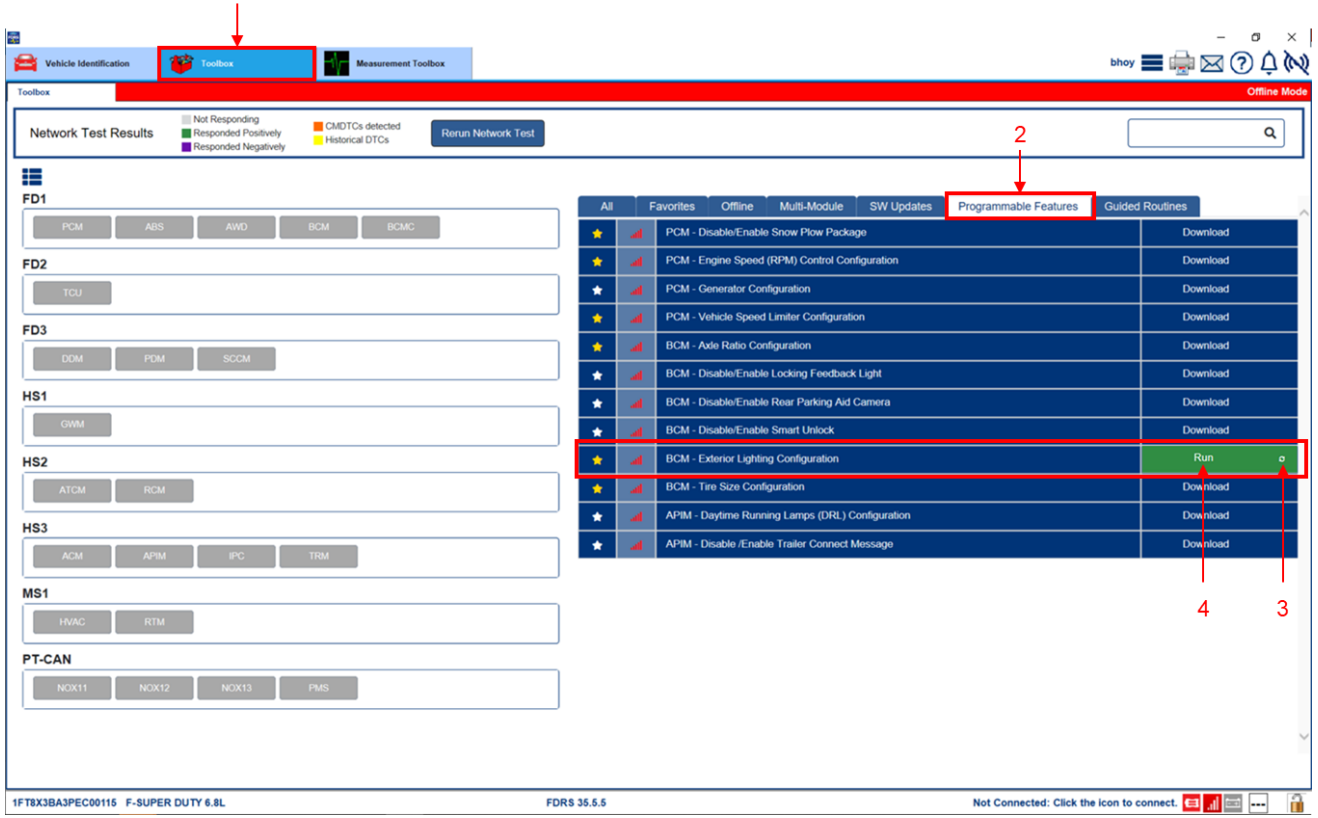
SUPER DUTY
REAR LIGHTING CIRCUITS (CONT)

FDRS Instructions to Configure Rear Lighting

Open the Ford FDRS tool, see the screen capture below to help visualize the steps

- Select “Toolbox”
- Select “Programmable Features”
- Download the latest version of “BCM – Exterior Lighting Configuration” if necessary
- Run “BCM – Exterior Lighting Configuration”
- Password is “FMVSS108” (all caps)
- The list of available lighting configuration options will appear (see right). Select the options listed below and revise to the provided values. Note: Only one option can be selected at a time, the order of selecting options is not significant.
    - If using LED lamps (Combined or Separate Stop and Turn), deactivate bulb outage
        - Select “Rear_Bulb_Turn_Outage_Cfg” – revise value to “NO_OUTAGE”
    - If using separate Stop and Turn Lamps, revise function of provided stop/turn circuits to turn only:
        - Select “LR_Turn_Lamp_Ckt_Usage_Cfg” – revise value to “TURN_ONLY”
        - Select “RR_Turn_Lamp_Ckt_Usage_Cfg” – revise value to “TURN_ONLY”
    - When done, select “Exit” to finalize the settings and perform a BCM reset.

Rear Exterior Lighting Configuration Options	Default Values for Chassis Cabs and PU Box Delete
Rear_LED_Turn_Outage_Cfg	NO_OUTAGE
LR_Stop_Pos_Lamp_Ckt_Usage_Cfg	NOT_USED
RR_Stop_Pos_Lamp_Ckt_Usage_Cfg	NOT_USED
LR_Turn_Lamp_Ckt_Usage_Cfg	STOP_TURN
RR_Turn_Lamp_Ckt_Usage_Cfg	STOP_TURN
Rear_Bulb_StopPos_Outage_Cfg	OUTAGE
Rear_Bulb_Turn_Outage_Cfg	OUTAGE
Fexible_5_Ckt_Usage_Cfg	NOT_USED
Flexible_6_Ckt_Usage_Cfg	NOT_USED



Available Exterior Lighting Configuration Options in FDRS tool

- OutageTrailer_Cfg
- Front_Bulb_Turn_Outage_Cfg
- Front_LED_Turn_Outage_Cfg
- Rear_LED_Turn_Outage_Cfg
- Rear_LED_Turn_Outage_CircuitUsed_Cfg
- HeadlampStyle_Cfg
- LowBeam_Cfg
- LF_High_Beam_Ckt_Usage_Cfg
- RF_High_Beam_Ckt_Usage_Cfg
- LF_Low_Beam_Ckt_Usage_Cfg
- RF_Low_Beam_Ckt_Usage_Cfg
- LF_Turn_Lamp_Ckt_Usage_Cfg
- RF_Turn_Lamp_Ckt_Usage_Cfg
- LR_Stop_Pos_Lamp_Ckt_Usage_Cfg
- RR_Stop_Pos_Lamp_Ckt_Usage_Cfg
- LR_Turn_Lamp_Ckt_Usage_Cfg
- RR_Turn_Lamp_Ckt_Usage_Cfg

Mapped to Circuits CLS23 and CLS27

- OutageHeadlamps_Cfg
- DRL_OnWithParkLampsOn_Cfg
- LF_RF_PositionLampCkt_Usage_Cfg
- Rear_Bulb_StopPos_Outage_Cfg
- Rear_Bulb_Turn_Outage_Cfg
- Exit

SUPER DUTY
TRAILER BRAKE CONTROLLER (TBC)

TRUCKS WITH A FORD TRAILER BRAKE CONTROLLER
All 2024 F-Super Duty vehicles are equipped standard with a factory trailer brake and lighting controller (TRM) which also controls initiates the trailer charging system. For trailer charging to operate, the TRM must detect a connected trailer and a brake pedal input before charging will be present at the trailer connector. The TRM for trailer charging and lighting features can operate independently of the brake control feature. There is no relay in the battery junction box for this feature anymore, so the factory module should remain installed even in the event an aftermarket brake controller is used.

A service kit (HC3Z-19H332-A) is still available for upfitters wishing to install an aftermarket brake controller. The vehicle must be equipped with either Trailer Tow Package (option code 531) or Max Trailer Tow Package (option code 535) for the kit to be functional.

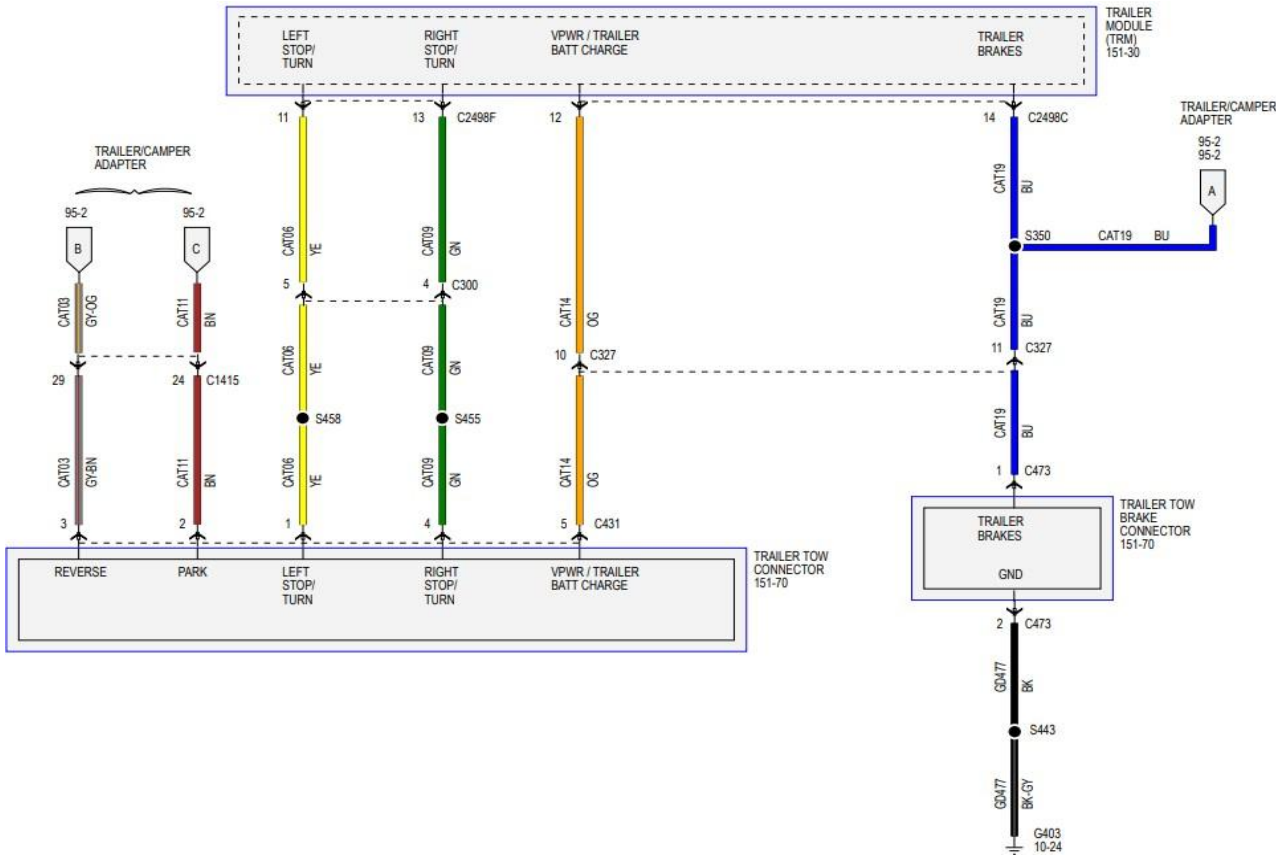
UPFITTERS INSTALLING ADDITONAL BODY LIGHTING
The trailer lighting outputs are controlled via a combination of outputs from the TRM, or smart relays in the battery junction box. The trailer circuits have the following load ratings:
- *Reverse Lamps: 10A, fuse rating*
- *Stop / turn signals: 8A max for each side, electronically controlled Trailer Battery Charge: 20A max, electronically controlled*

HARNESS CONNECTORS (CHASSIS CAB)
All Super-Duty harness now come with standard connectors (in lieu of blunt-cut wires) on the body trailer-tow harness at the aft end of the frame.

SERVICE PART #
FU5Z-14489-A
4/7-WAY TRAILER-TOW CONNECTOR

SERVICE PART #
LC3Z-13A576-A
5-FT JUMPER HARNESS
(COMPATIBLE WITH ADDED TRAILER-TOW CONNECTORS)

CHASSIS CAB



Body Builders Layout Book

SUPER DUTY

VEHICLE INTEGRATION SYSTEM 2.0

FORD PRO - Vehicle Integration System 2.0
SUPER DUTY PICKUP & CHASSIS CAB - if equipped.

- Pickup Vehicle Integration System 2.0 Optional - Order Code 18A
- Chassis Cab is **Standard**, but **Vehicle Integration System 2.0 Delete is available - Order Code 18Y**

ELECTRICAL OVERVIEW:
IMPORTANT - Super Duty has an electrical architecture that includes CAN encryption. This electrical architecture utilizes a central gateway module connecting all the networks and provide channels via the standalone OBDII connector for diagnostic commands.

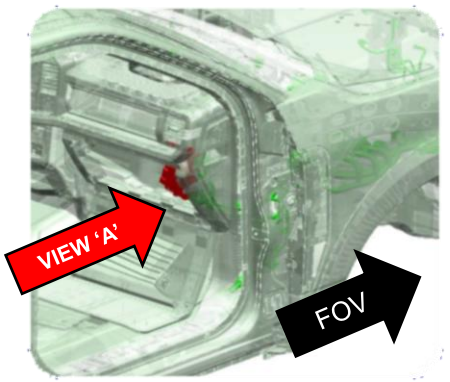
NOTE: The Super Duty electrical architecture does not provide a wired circuit for electronic park brake signal/status output. The electronic park brake signal/status output will be available in J1939 format for vehicles equipped with the Vehicle Integration System 2.0. (This signal would be equivalent to sending a diagnostic command to the ABS module for Park Brake status or gaining access to the vehicle CAN network and decode the message/signal.)

Vehicle Integration System 2.0 OVERVIEW:
Super Duty provides an improved upfitter experience through the Ford Pro Vehicle Integration System 2.0 (Vehicle Integration System 2.0) that simplifies the upfitting process by providing vehicle CAN output access in the preferred J1939 format while enabling one-way communication between the second unit body (SUB) and the vehicle.

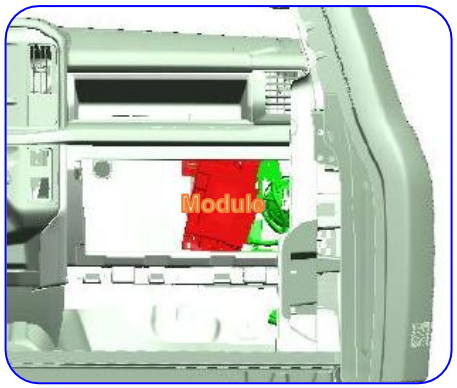
NOTE: Vehicle Integration System 2.0 can be installed in a vehicle if it was not ordered or equipped from factory (module installation referenced later in this document and/or referenced in the BBLB). Vehicle Integration System 2.0 Service Part Number: PC3Z-14G372-B* (Reference Engineering Part Number: PC3T-14G589-A*)

Vehicle Integration System 2.0 POWER ON/OFF STRATEGY
Vehicle Integration System 2.0 is powered at all times during 'Key-On' and 'Accessory' modes – Vehicle Integration System 2.0 module will be 'awakened' and/or 'asleep,' in a maximum of 5 seconds. In 'Key-Off' mode, the Vehicle Integration System 2.0 will not transmit any constant signal(s).

- Awake Function - The 'awaking' conditions are of two types:
  - a soft interruption (network management call from CAN) and
  - a circuit stimulation (any change of state in analog or digital inputs).
- Asleep Function - The trigger to go to sleep is based on the network management call from CAN network, this is dependent on conditions required for the module to sleep and/or 'Key-Off' mode.



PASSENGER SIDE OF VEHICLE SHOWN



VIEW IN 'A'

Vehicle Integration System 2.0 J1939 OUTPUT SIGNALS:		
ABS Active	Day	Vehicle Inhibit Motion
Ambient Air Temperature	Hours	Auxiliary Digital Input 1 Status
Air Conditioner Compressor	Minutes	Auxiliary Digital Input 2 Status
Accelerator Pedal Position	Seconds	Auxiliary Digital Input 3 Status
HVAC Recirculation Switch	Year	Auxiliary Digital Input 4 Status
Battery Current	Headlamp Low Switch Status	Auxiliary Digital Input 5 Status
Battery Voltage	Headlamp High Switch Status	Auxiliary Digital Input 6 Status
Battery Temperature	Headlamp Light Switch Status	Auxiliary Digital Input 7 Status
Brake Switch	Front Blower Speed	Auxiliary Digital Input 8 Status
Battery State Of Charge	Ignition Status	Auxiliary Digital Input 9 Status
Cruise Control Mode	Man Rgen Soot	Auxiliary Digital Input 10 Status
Day Running Light	Max Defroster Switch Status	Auxiliary Digital Input 11 Status
Door 1 Status	Odometer Master Value	Auxiliary Digital Input 12 Status
Hood Status	Oil Pressure Warning	Auxiliary Digital Input 13 Status
Door 2 Status	Perimeter Alarm Status	Auxiliary Digital Input 14 Status
Door 3 Status	Park Brake Switch Status	Auxiliary Digital Input 15 Status
Door 4 Status	Park Brake Status	Auxiliary Digital Input 16 Status
Door 5 Status	Park Light Headlamp Status	Auxiliary Digital Output 1 Status
MIL Lamp	Regenerative Braking Status	Auxiliary Digital Output 2 Status
Emergency Light Siren	Second Row Passenger Buckle Status	Auxiliary Digital Output 3 Status
Engine Status	Second Row Driver Buckle Status	Auxiliary Digital Output 4 Status
Engine Speed	Second Row Driver Middle Buckle Status	Auxiliary Digital Output 5 Status
Engine Coolant Temperature	Second Row Middle Buckle Status	Auxiliary Digital Output 6 Status
Engine Oil Temperature	Second Tow Passenger Middle Buckle Status	Auxiliary Digital Output 7 Status
Powertrain Status	Steering Wheel Angle	Auxiliary Digital Output 8 Status
First Row Driver Buckle Status	Stop Lamp Brake Request	Automatic Engine Idle Shutdown Override
First Row Passenger Buckle Status	Third Row Driver Buckle Status	Wheel Based Vehicle Speed
Front Fog Light Status	Third Row Middle Buckle Status	Vehicle Identification Number
Rear Fog Light Status	Third Row Passenger Buckle Status	Acceleration Rate
Fuel Level Percentage	Tire Pressure	Long Rate
Oil Transmission Temperature	Park System	Roll Rate
Neutral Gear	Left Turn Light Status	Vertical Rate
Current Gear	Right Turn Light Status	Yaw Rate
Select Gear	Hazard Light Switch Status	Front Wiper Switch Status

VEHICLE INTEGRATION SYSTEM 2.0 (CONT)

J1939 Vehicle Integration System 2.0 OUTPUT CUSTOMER CAN-SIGNAL ACCESS

1. Access to the Vehicle Integration System 2.0 and connectors is achieved by glove compartment removal. For glove compartment, please reference the Motorcraft Service Procedure.

2. With the glove compartment removed, reference the Vehicle Integration System 2.0 module and 2 connectors: Black 20-Way & Blue 6-Way (image highlighting below)

3. Disconnect both the Black 20-Way and Blue 6-Way from the module to ensure no power is being delivered to module. (Reference 23MY Super Duty Body Builder Layout Book for circuits/pin-outs details.)

4. The Black 20-Way circuits will be used to access the J1939 signals. Focusing on the Black 20-Way connector, carefully begin to unravel/unwrap the flocked tape around the harness such that enough workable length is available to expose the wire circuits. Stow away the unraveled/unwrapped flock tape so it can be reused for re-installation later.

5. Locate the J1939 wired circuits 3 & 4 (wire 3 CAN ' + ' GN/BU & wire 4 CAN ' – ' GY/BU). These 2 circuits will be used in order to perform the cut and splice to obtain the signals.

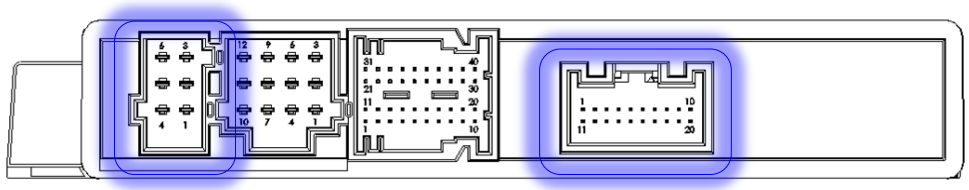
   NOTE: The circuits remaining in the harness will not be used and no longer need to be connected. Recommend taping the circuits back securely and stowed away from the splice.

   NOTE: Follow the Ford approved procedure for soldering circuits to complete the splice. These are CAN network circuits that are a twisted pair, and for the added length ensure it meets the twists per foot requirement (4 twists per 50mm)

6. Complete the splice, following the Ford Repair Guidelines, rewrap the flock tape removed (Step 4) or use an acceptable substitute ensuring that circuits are wrapped within 50mm from the back of the connector

7. Reconnect the Black 20-way, and Blue 6-way to the Vehicle Integration System 2.0 module

8. Reinstall the Vehicle Integration System 2.0, and glove compartment following the reinstallation procedure outlined by Motorcraft Service, www.motorcraftservice.com .

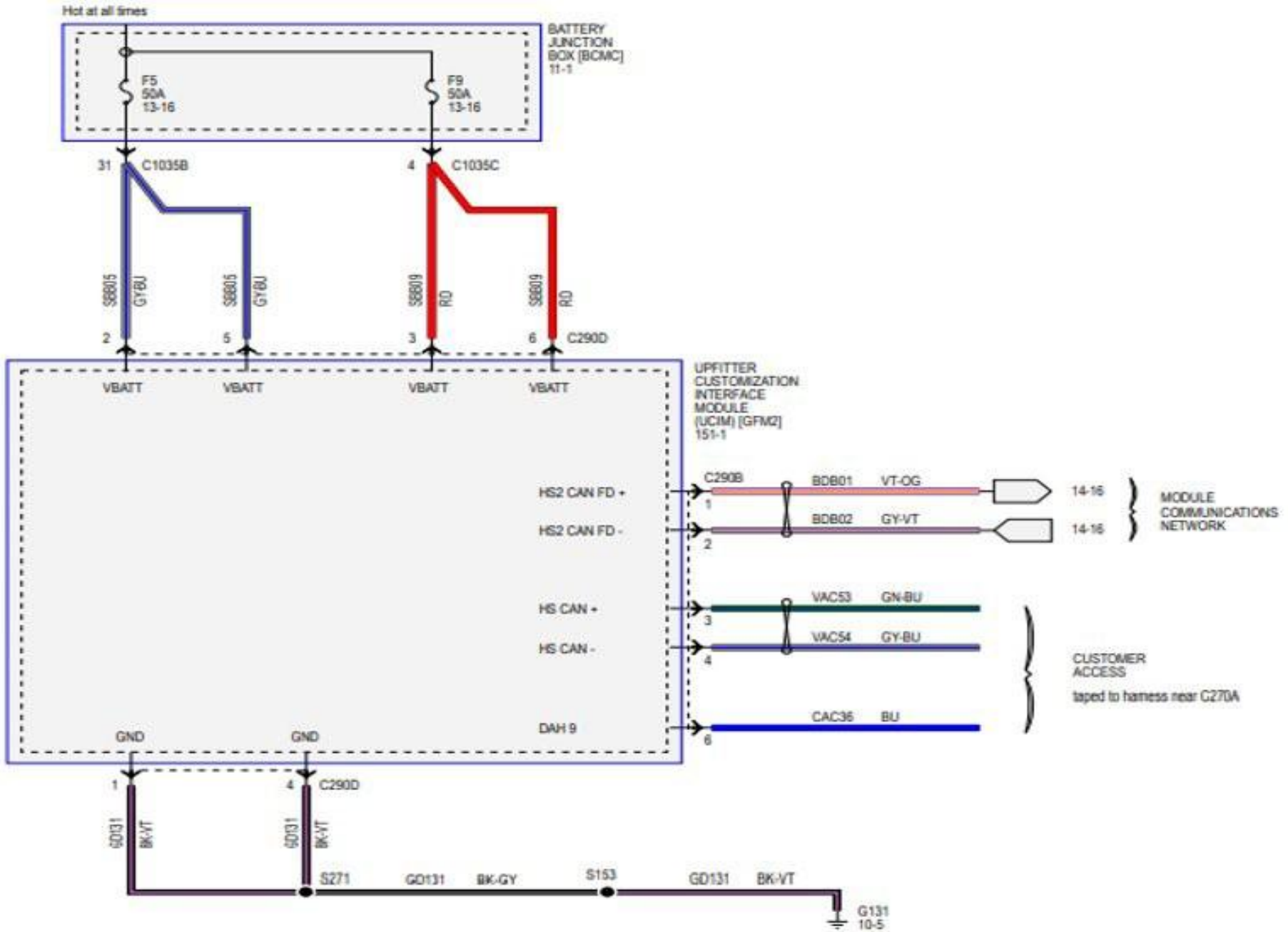


Vehicle Integration System 2.0 6-Way Connector View

Vehicle Integration System 2.0 20-Way Connector View

SUPER DUTY

VEHICLE INTEGRATION SYSTEM 2.0 (CONT)



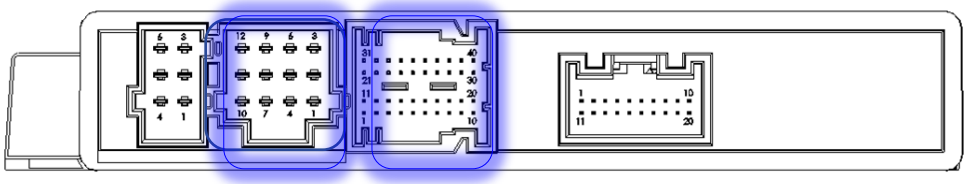
Body Builders Layout Book

SUPER DUTY

VEHICLE INTEGRATION SYSTEM 2.0

Vehicle Integration System 2.0 40-Way Connector

Cavity	Circuit	Color	Alt. Name	Signal Name	Description
1	CAC37A	YE/GN	LSD 1	MFA_15	LS Switch Output 0.5A, PWM
2	CAC39A	YE/VT	LSD 2	MFA_16	LS Switch Output 0.5A, PWM
3	CAC41A	GY/BN	LSD 3	MFA_13	LS Switch Output 1A, PWM
4	-	-	-	-	-
5	-	-	-	-	-
6	-	-	-	-	-
7	CAC20A	BU/GN	DAH 1	MFE_17	Digital Input, high active
8	CAC22A	GN/WH	DAH 2	MFE_19	Digital Input, high active
9	CAC24A	BU/GY	DAH 3	MFE_21	Digital Input, high active
10	CAC26A	GN/VT	DAH 4	MFE_23	Digital Input, high active
11	CAC43A	VT/GY	LSD 4	MFA_17	LS Switch Output 0.5A, PWM
12	CAC45A	WH/VT	LSD 5	MFA_18	LS Switch Output 0.5A, PWM
13	CAC47A	VT/OG	LSD 6	MFA_14	LS Switch Output 1A, PWM
14	-	-	-	-	-
15	-	-	-	-	-
16	-	-	-	-	-
17	CAC28A	BU/BN	DAH 5	MFE_18	Digital Input, high active
18	CAC30A	YE/BU	DAH 6	MFE_20	Digital Input, high active
19	CAC32A	GN/OG	DAH 7	MFE_22	Digital Input, high active
20	CAC34A	GN	DAH 8	MFE_24	Digital Input, high active
21	CAC54A	BN/GN	HSD 10	MFA_11	HS Switch Output 0.5A, PWM, Supply_2
22	CAC68A	BN/YE	HSD11	MFA_12	HS Switch Output 0.5A, PWM, Supply_2
23	CAC19A	BU	DAL 1	MFE_9	Digital Input, low active
24	CAC21A	GY	DAL 2	MFE_11	Digital Input, low active
25	CAC23A	GY/YE	DAL 3	MFE_13	Digital Input, low active
26	CAC25A	VT/WH	DAL 4	MFE_15	Digital Input, low active
27	VAC01A	WH/BN	ANL IN 1	MFE_1	Analog Input
28	VAC02A	GY/OG	ANL IN 2	MFE_3	Analog Input
29	VAC03A	WH/OG	ANL IN 3	MFE_5	Analog Input
30	VAC04A	YE	ANL IN 4	MFE_7	Analog Input
31	CAC69A	BU/GN	HSD 12	MFA_9	HS Switch Output 0.5A, PWM, Supply_1
32	CAC70A	VT/GN	HSD 13	MFA_10	HS Switch Output 0.5A, PWM, Supply_1
33	CAC27A	WH/GN	DAL 5	MFE_10	Digital Input, low active
34	CAC29A	GY/VT	DAL 6	MFE_12	Digital Input, low active
35	CAC31A	VT/BN	DAL 7	MFE_14	Digital Input, low active
36	CAC33A	GY/BU	DAL 8	MFE_16	Digital Input, low active
37	VAC05A	GN/BN	ANL IN 5	MFE_2	Analog Input
38	VAC06A	YE/VT	ANL IN 6	MFE_4	Analog Input
39	VAC07A	BN/BU	ANL IN 7	MFE_6	Analog Input
40	VAC08A	YE/OG	ANL IN 8	MFE_8	Analog Input



Vehicle Integration System 2.0 16-Way Connector View

Vehicle Integration System 2.0 40-Way Connector View

PU5T-14489-LA

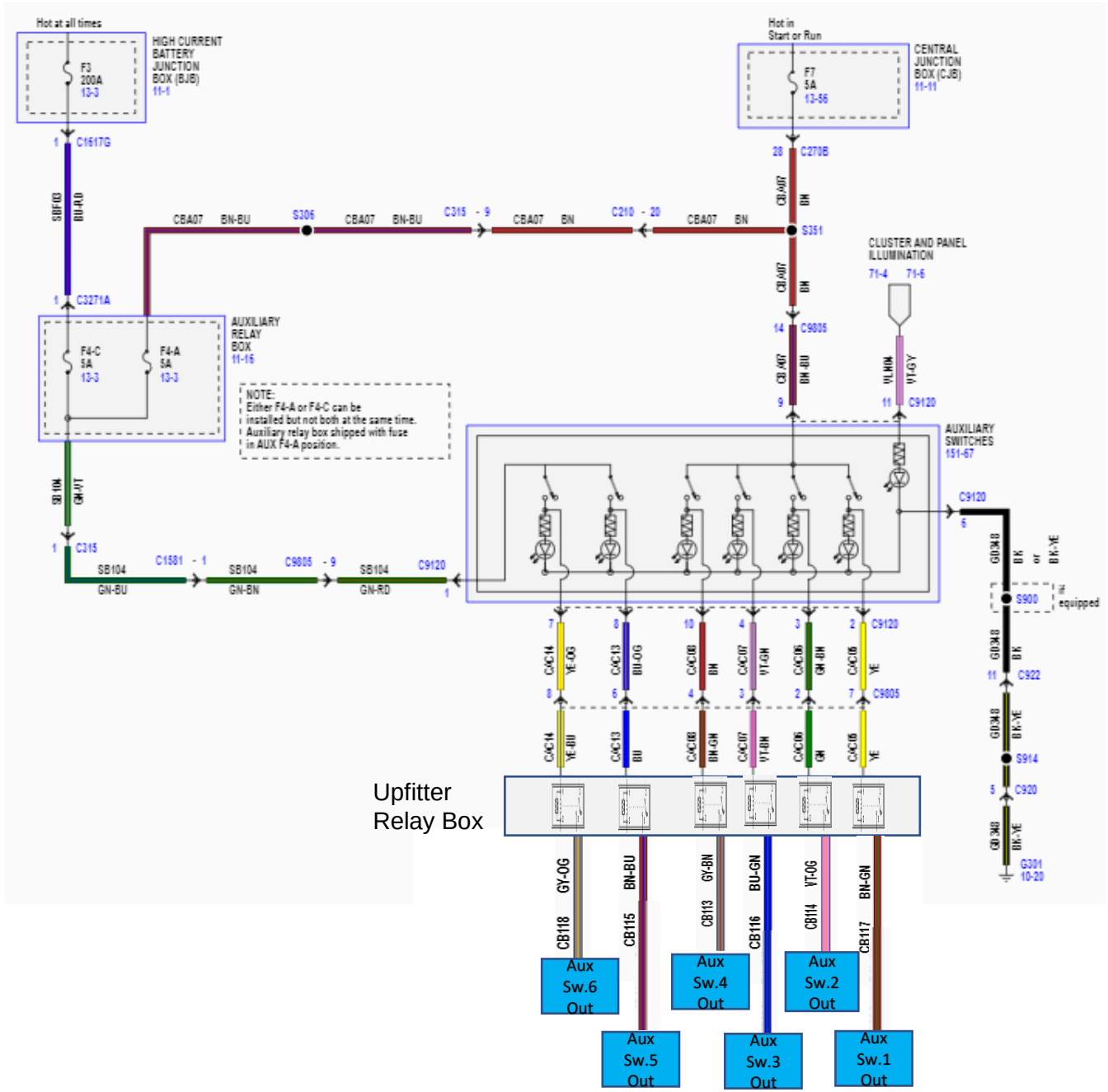
Vehicle Integration System 2.0 16-Way Connector

Cavity	Circuit	Color	Signal Name	Description
1	CAC38A	BU/BN	MFA_7	HS Switch Output 5A, Supply_2
2	CAC40A	BN/GN	MFA_5	HS Switch Output 5A, Supply_1
3	CAC42A	WH/BN	MFA_6	HS Switch Output 5A, Supply_1
4	CAC44A	WH/OG	MFA_8	HS Switch Output 5A,Supply_2
5	CAC46A	GY/OG	MFA_4	HS Switch Output 10A, Supply_2
6	CAC48A	WH/GN	MFA_1	HS Switch Output 5A, Supply_1
7	CAC50A	VT/GN	MFA_3	HS Switch Output 5A, Supply_2
8	WAC64A	BU	MFA_20	HB_1 Output 5A, Supply_1
9	WAC65A	YE/GY	MFA_19	HB_1 Output 5A, Supply_1
10	WAC66A	VT/BN	MFA_22	HB_2 Output 5A, Supply_2
11	WAC67A	GN/VT	MFA_21	HB_2 Output 5A, Supply_2
12	CAC51A	BU/OG	MFA_2	HS Switch Output 10A, Supply_1

Body Builders Layout Book
SUPER DUTY

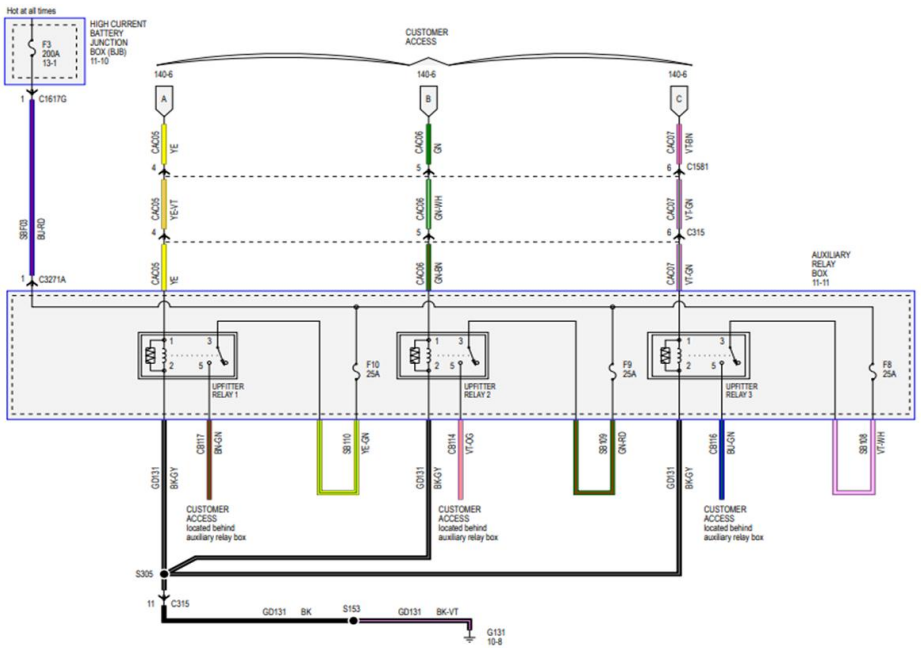
update

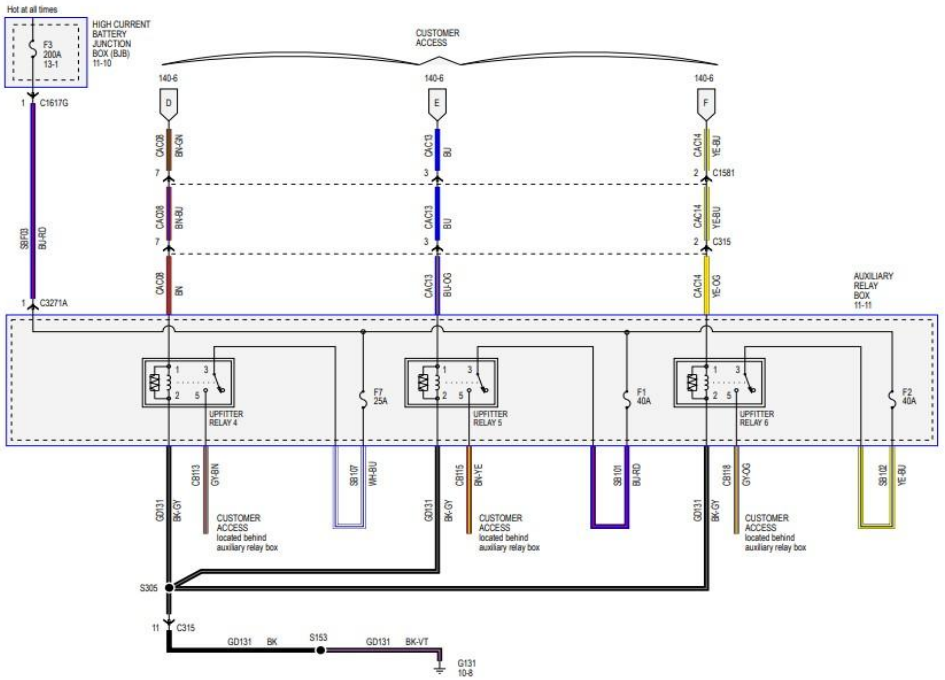
UPFITTER SWITCHES/ AUXILIARY RELAY BOX



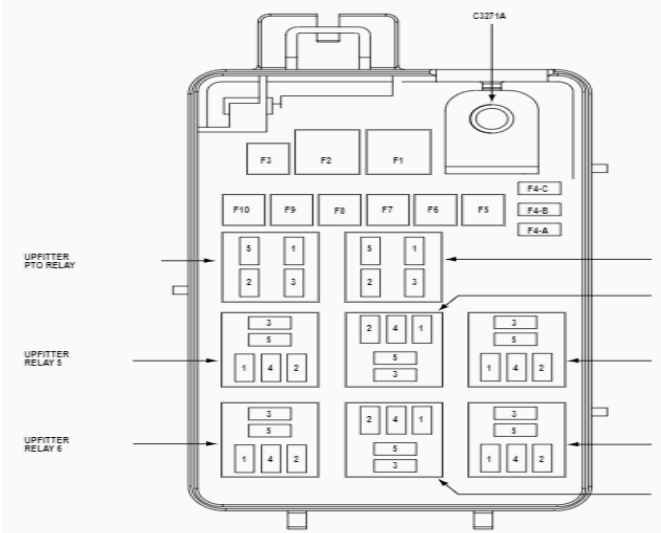
The Ford Upfitter Switches are optional overhead console mount switches (Option Code 66S) that control underhood mounted relays. (Reference the Upfitter Relay Box section of this BBLB).
All fuses are in the Upfitter Relay Box.

SUPER DUTY
UPFITTER RELAY BOX





AUXILIARY RELAY BOX



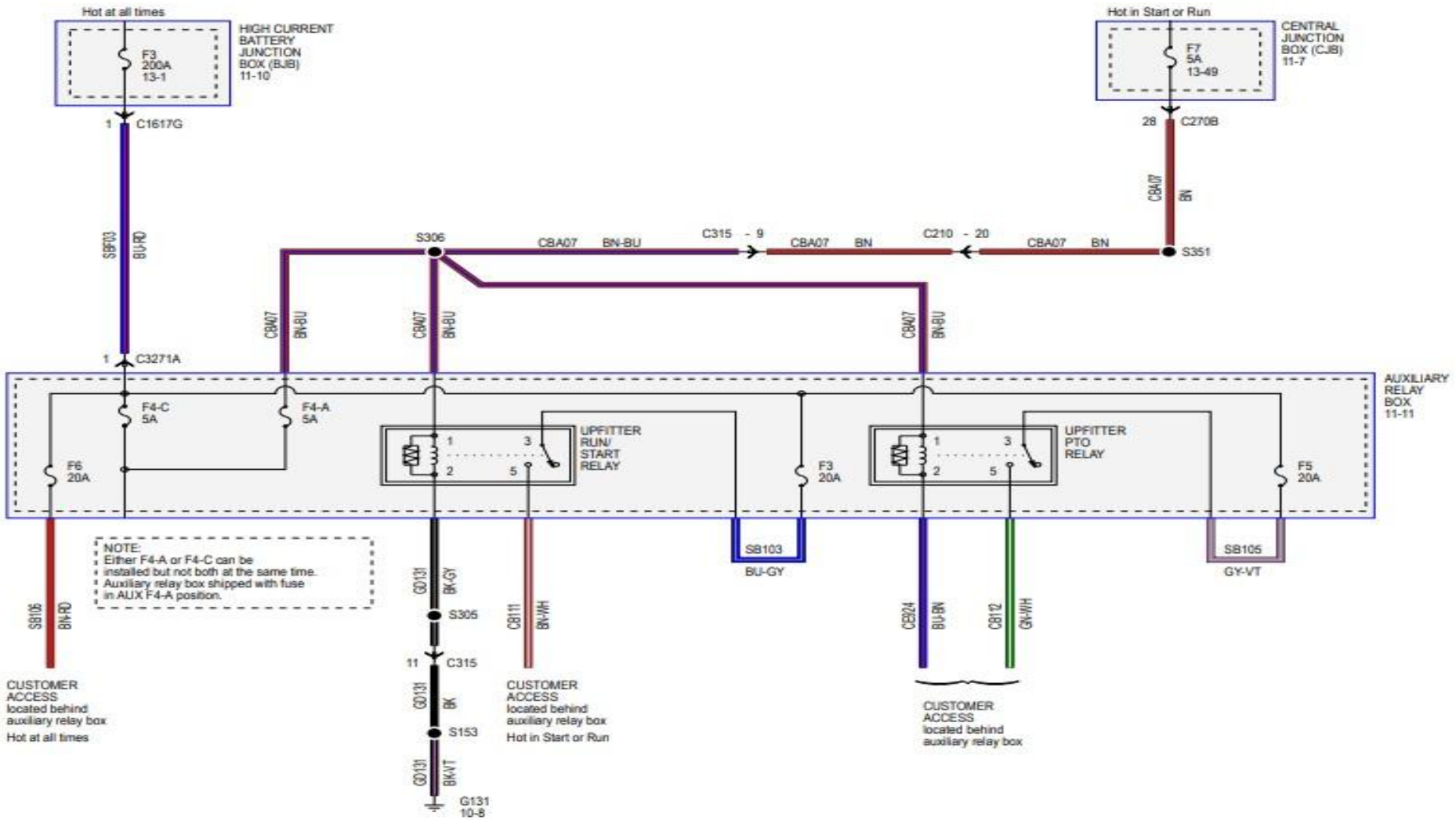
Fuse	Amps	Circuits protected
F1	40	Upfitter relay 5
F2	40	Upfitter relay 6
F3	20	Upfitter run/start relay
F4-A	5	Auxiliary switches (Hot in Start or Run)
F4-B	-	Not used
F4-C	5	Auxiliary switches (Hot at all times)
F5	20	Upfitter PTO relay
F6	20	Customer access (Hot at all times)
F7	25	Upfitter relay 4
F8	25	Upfitter relay 3
F9	25	Upfitter relay 2
F10	25	Upfitter relay 1

NOTE:
Either F4-A or F4-C can be installed but not both at the same time.
Auxiliary relay box shipped with fuse in AUX F4-A position.

Body Builders Layout Book

SUPER DUTY

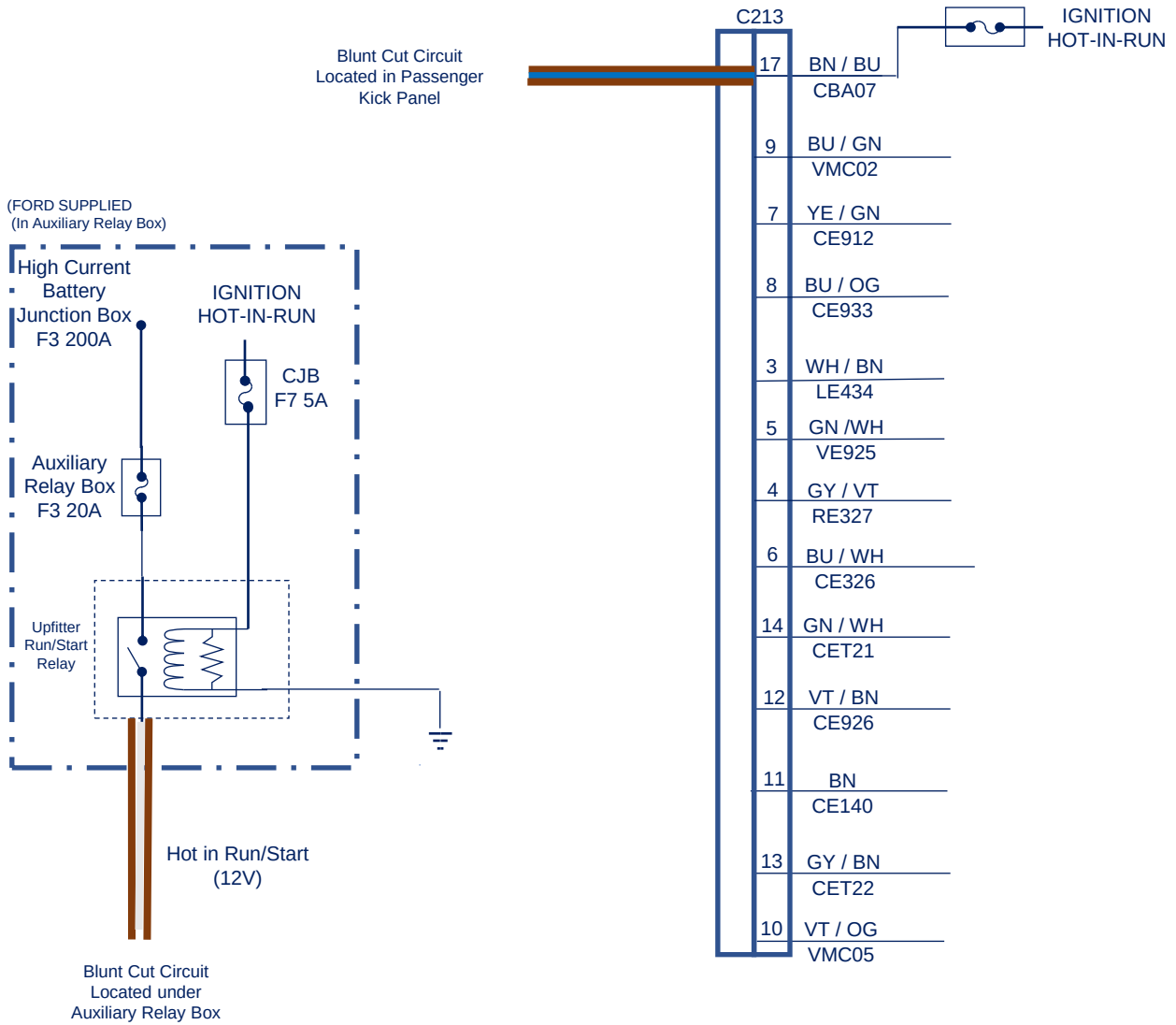
UPFITTER RELAY BOX - RUN-START/PTO RELAY



Description	Wire Color	Circuit	Fuse #	Rating
Run / Start Output	BN	CB111	F3	20A
PTO Relay Output	GN / WH	CB112	F5	25A
Battery Hot Output	BN / RD	SB106	F6	20A
PTO Relay Control	BU / GY	CE924	F4A or F4C	5A

Either F4A or F4C can be installed but not both at the same time.
Upfitter Relay Box is shipped with fuse in F4A position.

SUPER DUTY
IGNITION RUN CIRCUITS



SUPER DUTY
CHANGE CONTROL

- Added PTO/SEIC Neutral Activation for 6.7L 12/10/2024
- ADDED Pro Power Box Delete Connector Location 12/10/2024
- Updated Rear Lighting Guidance 8/28/2024
- Updated Vehicle Integration System 2.0 Nomenclature 2/28/2024
- Updated Pro Power Guidance 2/28/2024
- Updated website links 4/03/2024